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ABSTRACT

Equity within U.S. higher education is examined in three parts: Practices, Principles, and Policies. Public/private problems, attendance variables, and public subsidies to higher education are included in the Practices section. Part 2, Principles, discusses the place of philosophy, meanings of equity, remedying discrimination, and equality of opportunity. It is argued that equality of opportunity requires access to occupational positions and rewards for all students in spite of disparities in social class, geography, or handicap. The last section, Policies, focuses on problems, practices and principles, the policy content within higher education, issues for policy development (test scores, motivation and aspirations, availability and costs, and geographical disparities), and moral obligation and public policy. Among other things it is suggested that elementary and secondary school counseling services could influence aspirations and motivation. The California system, with its low cost and wide availability to minority and low-income students, is discussed as the best example of state responsibility for public higher education. Appendices include student enrollment from 1948 to 1978, college enrollment rates of 18 to 24-year-olds from 1948 to 1978, high school noncompletion rates, college enrollment rates by family income, graduate and professional school enrollment, minority representation in graduate business school enrollments, enrollment rates by geography and cohort 18 to 24 for 1976, enrollment in two-year colleges as a percent of total college enrollment for 1976, and per student spending by state. (CC)

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EQUITY IN HIGHER EDUCATION

by

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PART I: PRACTICES*

In the United States in 1978, 11,415,020 students were enrolled in one form or another of education beyond secondary school. They attended 3,130 different institutions of various types: junior colleges, technical schools, 4-year colleges, universities, graduate and professional schools; propriety, private non-profit and public; large and small; highly, moderately and nonselective. They attended for a variety of reasons, pursued a variety of majors and curricula and, presumably, reaped a variety of benefits.[1]

Higher education in the United States is, in short, a large and complex system. This report is concerned with equity within that system. We proceed by first examining some of the features of the system -- who goes where, why, at what costs and to what ends -- to see whether available data document or suggest inequities in access, costs, or benefits. We then lay out a series of legal and philosophical principles of equity and remediation. In the final section we bring together our analyses of practices and principles and raise issues of policy for remedying the inequities we have identified.

* This section was written with considerable assistance from Neal Baer, Harvard University.

In this section, we look at two kinds of data that provide different perspectives on the question of equity in higher education. The first is data on the characteristics of students and the institutions they attend. Here we look at disparities in attendance by race, sex, class and geography. We ask what explains the disparities -- which do in fact, exist -- and whether there is evidence of direct discrimination or inequitable treatment.

The second kind of data we look at is that on the distribution of public subsidies for higher education. The United States has a mixed public/private system of higher education. About 75 percent of students are in public colleges and universities, and public funds contribute slightly over half of the total revenues of higher education -- about 22 billion dollars in 1977.[2] The greatest discrepancies in the distribution of these substantial public funds are among states and regions. In examining the data on public subsidies, however, we also look at distributions by race, sex and income class.

Throughout the discussion a few basic features of the U.S. system of higher education are worth keeping in mind. First is the enormous expansion in the number of post-secondary institutions, in the number of students and in the proportions of young adults who continued their schooling beyond high school during the years since World War II. The number of institutions grew from 1,788 in 1948[3] to 3,130 in 1978,4 while the number of

students grew from 2,408,249 in 1948,[5] to 11,285,787 in 1978.[6] (Figure 1).* The enrollment rate for 18-24 year olds grew from 11.2 percent in 1948 to 26.1 percent in 1977. (Figure 2). This expansion has affected both men and women, of all races, regions and income levels. It has affected older students as well as younger: In 1977, for example, 36 percent[7] of enrolled students were age 25 or older compared with 18.6 percent[8] in 1968 -- an astounding increase of nearly 100 percent in only ten years.

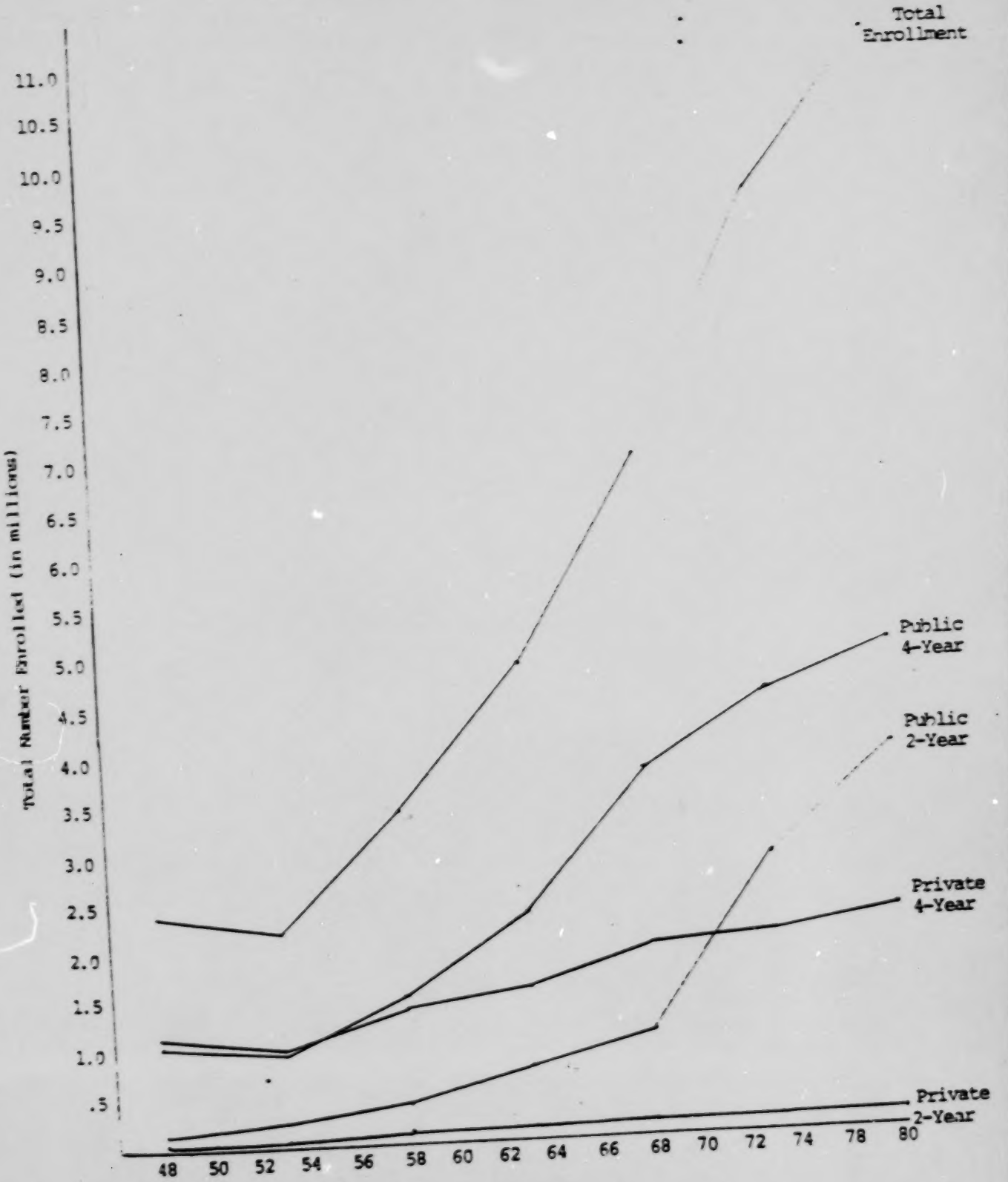
Second, the U.S. system of higher education is now a predominantly public system. The post World War II expansion occurred mostly in public community colleges and vocational-technical institutions with expansion as well in public universities and four-year colleges. This resulted in an increase in the proportion of students in public institutions from 49.4 percent in 1948[9] to 78 percent in 1978.[10] (Figure 1). This shift toward public institutions has been steady and shows every sign of continuing. One particularly interesting aspect of this trend in increasing enrollments in public institutions is found in community colleges.

A corollary of the fact that higher education in the U.S. is now predominantly public is that it is also predominantly local. In 1978, 48.5 percent of first-year students were attending a college within 50 miles of their parents' home and only 8.3 percent were more than 500 miles away.[11] Thus state and local

* More detailed tables appear in the appendix.

Figure 1

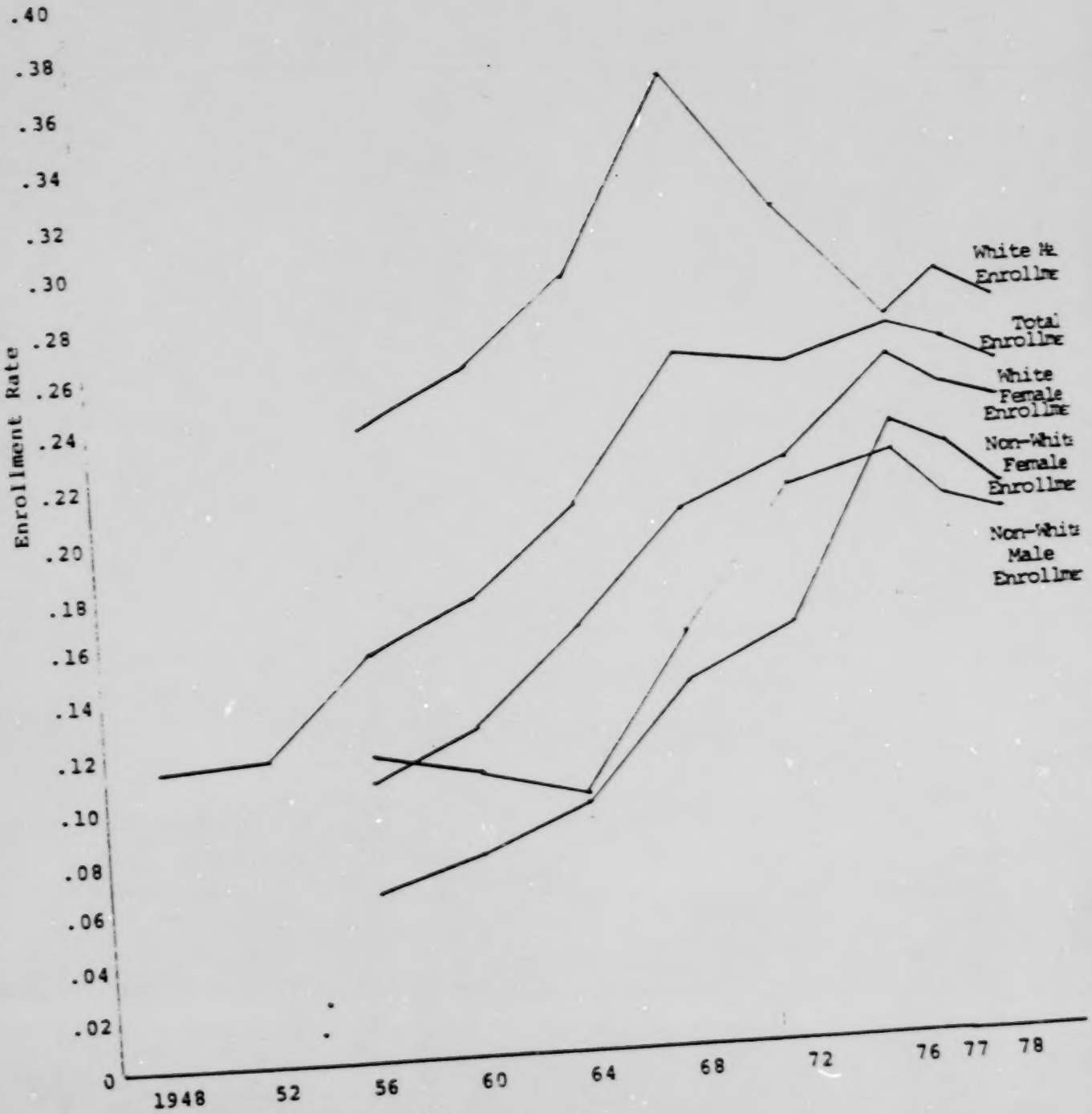
Growth in Student Enrollment: 1948-1978



Source: See Appendix Table I

Figure 2

Growth in College Enrollment Rates for 18-24 Year-Olds



Source: See Appendix Table II

variations in the availability of higher education must be important considerations in any discussion of equity. Local situations give more precise notions of educational opportunity than do national statistics, though estimates of the former are much harder to come by and thus frequently ignored.

A third important fact about the U.S. system of higher education is that the number of undergraduate places in community and four-year colleges is about equal to (or perhaps slightly greater than) the number of applications for them. A study of the high school graduating class of 1972 found that only 3.3 percent of applicants were rejected by every school they applied to, and a third of them ended up in college anyway.[12] Since 1972, if one believes college admissions officers, the ratio of places to applicants has increased. It will surely increase in the 1980s when the ever-smaller birth cohorts of the 60s and 70s reach college age. The system as a whole thus accommodates nearly everyone who wants to enter it, even though admission to individual institutions may be highly competitive and some students' opportunities may be severely limited.

This rough equivalence of applicants and places does not characterize graduate and professional education. In 1976, for example, 57 percent of law school applicants were admitted; in 1975, 36 percent of all medical school applicants were admitted to at least one school. At the graduate and professional level, therefore, the system as a whole is selective, not just individual institutions.[13]

These characteristics -- rapid expansion since World War II to a system which is today predominantly public and local roughly equal in size to the number of applicants -- suggest some guidelines for our analysis of research and data. They suggest that we attend carefully to the public sector and to geographical variations in attendance. They also suggest that we focus on the distribution of students within the system -- attendance at two v. four year colleges, for example -- rather than simply on enrollment rates. These questions have not been central concerns of research in the past, and thus our review is scanty in many places. Nonetheless, we attempt to speak to the major issues raised by the system as it currently exists.

A. Is the Problem Worth Worrying About?

The problem of equity in higher education attracts attention because higher education is considered an important resource both to the individuals who receive it and to the society which benefits both directly and indirectly. The importance of the resource determines to some extent how much we worry about its distribution. Thus this section reviews some of the literature on the benefits of higher education, both private and public.

Private benefits: Higher education is believed to have two kinds of benefits for individuals: economic benefits which manifest themselves in increased earnings of college graduates, and non-economic benefits in terms of the "quality of life." Both are difficult to measure. Although there are clear between

high school and college attenders (or graduates) on a number of demographic, economic, social and attitudinal characteristics, it is a thorny research problem to determine whether the differences are caused by college attendance or simply reflect pre-existing differences between those who go to college and those who do not. In addition, the non-economic characteristics are difficult to get a handle on at any level.

Economic returns: Table 1 shows the median incomes in 1975 for men and women by level of education completed; Table 2 shows the proportions of college graduates and above in selected occupations in 1970 ordered by median income for the occupation. The tables document an association between level of education, occupation, and income. Data like these, collected regularly by the U.S. Bureau of the Census, have been used to calculate the monetary payoffs to a college degree. Early estimates of those monetary payoffs added up the earnings differences between high school and college graduates at each age and calculated the total worth of a college education over a life time. More sophisticated estimates discount earnings over the life time on the assumption that money in the future is less valuable than money today. They also consider the cost of acquiring a college education, both out-of-pocket costs (for such expenses as tuition) and foregone earnings. Recent estimates of the rate of return to college range from about 10-13 percent in 1968, falling to between 7-10 percent in 1973.[14]

Table 1

Median Income by Level of Education,
For Men and Women 25 Years and Older with Income,
1975

Level of Education	Median Income Males	Median Income Females
8 years or less	$ 5,699	$2,460
4 years high school	11,914	4,724
4 years or more college	16,673	8,491

Source: Current Population Reports, Series P-20, No. 334, January 1979, Table 22

Table 2

Percent of College Graduates and
Median Income, Selected Occupations, 1970
Men

Occupation	Percent College Graduate	Median Income
Professional, Technical, Kindred	57.7%	$11,716
Engineers	58.6%	13,520
Physicians, dentists & related practioners	91.6%	20,685
Teachers (college & univ)	87.3%	12,215
Managers & Administrators	25.2%	11,807
Salaried, retail trade	13.9%	10,326
Self-employed, retail trade	7.2%	14,775
Salaried & all other industries	31.5%	10,358
Clerical & Kindred Workers	9.0%	8,279
Mail handlers & postal clerks	3.7%	8,352
Craftsmen & Kindred Workers	2.1%	8,698
Machinists	.9%	8,698
Carpenters	1.1%	7,577
Operatives, except Transport	1.0%	7,514
Truck drivers	.5%	7,705
Farmers	3.8%	5,390

Table 2 (cont'd)

Women

Occupation	Percent * College graduate	Median Income
Professional, Technical, Kindred	52.9%	$6509
Teachers	82.2%	6819
Registered nurses	16.5%	5756
Other (lawyer, doctor, engineer, etc)	43.5%	6579
Managers & Administrators	14.0%	5709
Salaried	16.0%	4922
Self-employed	6.6%	7697
Clerical & Kindred	3.7%	4673
Bookkeepers	2.5%	4707
Secretaries, stenographers, typists	4.1%	5237
Craftsmen & Kindred	2.6%	4673
Operatives, except Transport	.5%	3899
Service Workers, except Private Household	1.2%	2696

Source: * U.S. Bureau of the Census. Census Population 1970. Special Report PC-2, 8-B, Earnings by Occupation and Education. Washington, D.C.: Government Printing Office, 1973

The problems in estimating rates of return, and the reason that recent estimates vary so widely, come from the fact that young adults who go to college are different from those who do not even before they begin their freshman year. College-goers tend to come from better off, smaller, northern, white families, to have better high-school grades, and to score higher on standardized ability tests than those who do not go to college. They may also be more highly motivated and perhaps more diligent -- all characteristics that would help them get better jobs and earn more money whether or not they went to college. To know what college itself adds to earning power, these other characteristics must somehow be controlled.

The best recent research on the effects of higher education uses longitudinal data and multivariate statistics. Results from several data sets are summarized in Christopher Jencks' Who Gets Ahead, which concludes: "Completing college rather than high school is associated with an occupational advantage of more than one standard deviation among 25-64 year olds. The advantage is almost the same when family background and test scores are controlled."[15]

Jencks' analysis suggests that completing college does indeed confer economic benefits. Economists have traditionally argued that this results from education leading to increased human capital and thus increased productivity. One need not accept the

human capital theory, however, to explain the economic benefits of higher education. Lester Thurow's theory of job competition, presented in Generating Inequality, offers a plausible alternative explanation.[16] Thurow argues that almost all the skills and knowledge necessary for job performance are acquired on the job. Employers know this, and realize that hiring someone commits them to a substantial investment in on-the-job training. They look for prospective employees who are likely to be cheapest and easiest to train. Level of education provides an easy indicator of those characteristics related to ease of training. Employers thus hire the better educated first, reaching further down in the education queue when labor is tight and when they have lower level jobs to fill. For the prospective employee, possession of an educational credential increases the probability of getting a better job and earning higher wages.

Most research looks only at years of education, not where the education was obtained nor at how the rapid recent growth of vocational-technical institutions may have affected the relationships among credentials training, and jobs. Jencks found that those students who attended "selective" colleges earned 28 percent more than those who graduated from a "nonselective" college. The earning differences among men who attended "selective," "highly selective," and "very highly selective" colleges were statistically insignificant.[17] Information on the effects of attending other kinds of institutions -- public versus private; two-year college versus four-year college versus research university -- is sorely lacking.

Taken as a whole, research on rates of return to higher education suggests that education does indeed have a cash payoff, although the payoffs have been declining in recent years (and may now be well below real estate or even treasury bills). Attending more selective institutions yields slightly higher rates of return. On the other hand, "for men with similar backgrounds, differences in college selectivity bear no significant relationship to occupational status"[18]. Furthermore, the economic value associated with attending a selective institution may tend to decrease in the future as more people with bachelor degrees enter the job market. It is, however, difficult to disentangle the actual contribution to earnings made by attending a selective institution or by the individual characteristics and abilities one brings to an institution. But it is nonetheless clear that higher education has some importance as an individual economic investment, though perhaps not so much as American mythology once supposed.

Noneconomic benefits: In addition to better jobs and higher incomes, higher education is alleged to enhance the quality of life of its recipients: to make them more sophisticated in their tasks; more accomplished in a greater variety of activities; more confident and poised, and so on. The satisfactions of developing capacities and of using them more fully in both work and leisure are claimed as benefits of going to college. Entering students certainly expect non-economic in addition to economic benefits.

As reasons for attending college, the freshman class of 1978 gave the following:[19]

Able to get a better job	75.4%
Learn more about new things	74.0%
Gain general education	68.3%
Able to make more money	60.4%
Meet new people	56.6%

Moreover, at least one poll of college alumni, (class of 1950) suggests that they think they did indeed reap a variety of benefits. Among the 8,300 alumni polled in 1969, "very much" or "quite a bit of" benefit were reported in the following areas:[20]

Vocabulary, facts	79%
Critical thinking	72%
Personal development	66%
Specialized skills	64%
Philosophy, culture	64%
Social & economic status	63%
Communication skills	63%
Literature	62%
Social development	61%
Individuality	61%

These benefits are, of course, much harder to measure than economic returns. Research has not been particularly successful even in documenting differences by educational level, not to mention controlling for the background characteristics that may

explain them independently of college attendance. Nonetheless, there are some studies that find positive, non-economic effects of attending college.

Among the most intriguing are studies of physical health. Life expectancy increases with education, with age-specific mortality rates lower at each age for the college educated.[21] Infant mortality rates are lower for the children of better educated parents.[22] The college educated also seem to enjoy (or at least to report) generally better health.[23] The positive relationship between education and health seems to persist even when income and other background characteristics are controlled. The studies have not been able to establish conclusively that education affects health rather than vice versa; nor can they explain how education might make people healthier. One possibility is that education increases exposure and receptivity to information about nutrition, fitness, preventive care and the treatment of disease, and thus produces more informed and competent users of the health care system. Another possible explanation is that higher education provides access to jobs with safer and healthier working conditions, an effect not adequately studied or controlled in existing studies.

Higher education also appears to affect family life. The college educated, on the average, marry somewhat later[24] and have smaller families[25] than the less well educated. They are somewhat more egalitarian in the allocation of roles and tasks between husbands and wives, or at least express more egalitarian ideals.[26] They spend somewhat more time with their children,[27]

watch less TV,[28] and have higher educational and occupational aspirations for their children.[29] Many of these differences may result, however, not from college per se but from the better educated parents and higher status home environments which are more characteristic of those who attend college than of those who do not.

Attending college probably enhances intellectual development. In an exhaustive literature review done for the Carnegie Commission on Higher Education, Bowen looked at a large number of studies, a few of which were longitudinal and many of which tried to control for background characteristics, and concluded that college attendance:

- substantially increased substantive knowledge;
- moderately increased (change of .4 to .7 standard deviations) verbal skills, intellectual tolerance, aesthetic sensibility and the probability of continuing learning over the lifetime;
- increased mathematical skills, rationality and creativity a small amount (change of .1 to .4 standard deviations.)[30]

A fascinating analysis of general knowledge questions asked on public opinion polls by Hyman, Wright and Reed documented an association between level of education and information on current events, history and general trivia.[31] Because many of the questions addressed current topics that respondents could not have learned about in school, the differences suggest that education

is associated with exposure to sources of information and perhaps with retention of knowledge. Again, however, it is impossible to completely disentangle the actual effects of education from the effects of greater intellectual ability and higher status home environments among those who attend college.[32]

Bowen also reviewed studies on personal identity and self-discovery, most of which rely on subjective self-reports. Bowen concludes:

> "...a major outcome of higher education is to facilitate the search of each student for his identity -- for discovery of his talents, interests, values, and aspirations. It may well be that this is one of the more important services that higher education can render for its students."[33]

Finally, studies of psychological well-being find differences between the better and less well educated. The college educated report themselves as somewhat happier, on the average, and somewhat more satisfied with their jobs and family lives. They report somewhat fewer psychosomatic symptoms and are less likely to be admitted to mental hospitals (though more likely to undertake private therapy).[34] These differences are not large, and the direction of causality is impossible to ascertain.

Taken as a whole, research on the private benefits of higher education finds positive, if modest, economic returns. It also finds positive, if even more modest and more difficult to document, non-economic benefits in health, family life, intellectual development and psychological well-being. These findings support the public perception that higher education is a valuable commodity. Whether it is as valuable as we have been led to believe

or so valuable that everyone ought to have it is a question we leave open for the moment.

Public benefits: In addition to privately benefitting individuals who attend college, higher education is believed to benefit the society as a whole: These "external benefits" presumably justify our substantial governmental expenditures on colleges and universities. The public benefits of a better educated population may come in politics, culture, economics and social values.

One of the standard arguments for public education is that it is necessary for democratic government. Education is said to produce an informed citizenry, competent to participate in public life and able to understand and influence government decisions. It is said to increase tolerance among racial and ethnic groups and to cultivate appreciation for civil liberties and constitutional government. Moreover, higher education, it is argued, provides wiser and more effective political leadership.

Surveys suggest that the college educated are indeed better informed about public affairs, more tolerant and more protective of civil liberties. The college educated also tend to participate more in government at all levels, with higher voting rates than the less well educated, higher rates of activity in political parties and local government and greater participation in civic organizations of all types.[35] Whether this has all led to better government, however, is open to debate. The nation does seem to have become more racially tolerant over time, more able to tolerate dissent and more committed to social welfare programs

for the poor -- developments which have occurred along with a continuously increasing average level of education. Progress in other areas of government is less apparent.

Higher education is also said to produce a higher level of cultural achievement and appreciation in the society as a whole. Two kinds of effects can, and perhaps do, occur. First, colleges affect their students tastes, introducing them to elite literature, music and art. As adults, the college educated provide support for classical music, art, theatre and dance. In addition, because they also make up larger segments of the audience for popular culture, the college-educated population may provide a market for more intelligent and complex programming in the mass media. That college education is associated with elite cultural tastes is documented by a number of studies.[36] Effects on popular culture are not understood, and it is thus impossible to say whether education has a net positive or negative effect on the richness and diversity of American culture. It is possible, for example, that participation in and appreciation of ethnic cultural traditions has been diminished.

A second kind of cultural effect derives from the activities of educational institutions. College and university faculties may be the predominant producers of culture in contemporary America. They are surely the most productive practitioners of scholarship, both important and trivial, in the humanities, the social sciences and the natural sciences. In addition, colleges

and universities are important sources of musical and dramatic compositions and of works of art. They are, in effect, both the preservers of old cultural traditions and the creators of new.

To the economy, higher education is believed to contribute higher quality labor, increased productivity, managerial capability, research and technological innovations. Attempts have been made to estimate the contributions of education to economic growth. Dennison, using a growth accounting system, identified the sources of US economic growth, 1929-1969, as follows[37] (in percentages of an average annual growth rate of 3.4 percent):

	1929-69	1948-69
Potential national income	100.0	100.0
Advances in knowledge & changes not elsewhere classified	31.1	34.1
More work done, with account taken of the characteristics of workers except education	28.7	23.9
More physical capital	15.8	21.6
Increased education per worker	14.1	11.9
Improved resource allocation	10.0	9.0
Dwelling occupancy ratio & irregular factors	0.3	-0.5

Of the 14 percent contribution of education about a quarter, or between 3 and 4 percent of total economic growth, can perhaps be attributed to higher education.[38] In addition, higher education may have contributed less directly to advances in knowledge (which account for 31 percent of the annual growth rate in

Dennison's accounting) and, through improved managerial performance, to improved resource allocation. Dennison's percentage estimates need not be believed precisely in order to conclude that higher education has contributed at least something to economic growth.

Finally, external or public benefits may accrue to the extent that higher education promotes social mobility and economic opportunity. If an open, mobile society is considered desirable, and both public opinion polls and social commentary document that it is, institutional vehicles for mobility benefit society generally. If, on the other hand, higher education, as some critics argue, reinforces and rigidifies class stratification, then its "benefits" here might be negative.

The evidence on social mobility is difficult to make sense of. As noted in the section on private economic benefits, higher education is associated with higher levels of occupational status and income. Part of this association can be attributed to the higher status and income of the families college students tend to come from; to this extent, higher education reinforces rather than challenges the existing status system.[39] Family background is by no means the only determinant of either college attendance or adult status, however, and education appears to influence status and income independently of family background.

The correlation between parents' and children's occupation and income is relatively modest, though positive, suggesting a degree of social mobility. The correlation does not, however, appear to have decreased over time, as would be expected if

increasing rates of college attendance actually produced increased mobility.[40] It may be that higher education has tended to balance out other tendencies toward rigidity in the system, thus having itself a positive effect on mobility that is matched by parallel negative effects. There is no evidence of this, however, and no clearly identified counter-tendency toward rigidity. Thus the hypothesis that expanding opportunities in higher education lead to a more mobile society must remain hypothetical.

Available research and argument suggest that there are indeed public benefits to higher education, though many of these are nearly impossible to document and others seem to be much more modest than the conventional wisdom would have us believe. Whether the public benefits are great enough to justify present levels of public expenditure or increased levels in the future cannot be answered by quantitative analysis. Political answers are given at each budget cycle of state and federal governments. For the time being we will accept those answers as estimates of the perceived aggregate value of higher education to the public and concern ourselves with distributional questions.

It is worth keeping in mind that questions about the level of private and public investment in education are analytically (though perhaps not practically) different from questions about the distribution of that investment. One can argue, for example, that the level of overall investment is too high -- that too many people go to college - and still argue that the enrollment of racial minorities and the poor ought to increase because they are

not getting their rightful share of the places. It may be that the level of investment must increase in order to correct distributional imbalances, following the political rule of always equalizing up rather than down. Having established that higher education is important enough to worry about, however, our general focus will be on distributional issues, rather than on trying to argue that the importance of higher education is so high (or low) as to justify a substantial change in the level of public and private investment.

B. Who Attends?

In the United States in the 1970's about 75[41] percent of young people graduated from high school. By 1977, approximately 17% of the white cohort between the ages 18-19 were not high school graduates, while 22% of the black cohort and 33% of the Hispanic cohort had not completed high school.[42] (See Appendix Table III) Of those students who did graduate, about half[43] entered some form of post-secondary education either directly after high school or after an intervening period. About half of these, or perhaps 20-25[44] percent of young people graduated from a four year college. About 22 percent[45] of all college graduates went on to graduate or professional training.

Who are these students, and what kinds of post-secondary education do they get? Does attendance vary by race, sex, income class or geography, suggesting the existence of discrimination or inequity? Do the disparities seem to be increasing or decreasing over time, suggesting whether the problems are increasing or moving toward solutions?

Figure 1 showed that college enrollment increased dramatically between 1948 and 1978 for both sexes and both racial groups of 18-24 year olds. White enrollment rates were higher than those of blacks and other minorities in 1977 (shown by age in Table 3). Female enrollment rates increased more rapidly than those of males (which actually decreased between 1970 and 1977:[46] By 1977, 18-19 year old women were more likely to be enrolled in college than 18-19 year old men.

Another perspective is provided by looking at educational attainment by cohort. Table 4 shows, as Figure 1 suggested, that educational attainment at age 25-29 has risen over time for all groups, that minorities and women have lower attainment rates, and that the gaps have closed over time.

Table 3

College Enrollment Status of 18-19, 20-21, and 22-24 Year-Olds by Race and Spanish Origin. 1978

	18-19	20-21	22-24
All Races	35.6%	28.4%	15.8%
Male	35.0%	30.7%	18.7%
Female	36.1%	26.2%	13.0%
White	36.8%	28.8%	15.6%
Male	36.4%	31.3%	18.8%
Female	37.3%	26.4%	12.6%
Black	25.3%	23.4%	13.6%
Male	23.1%	23.1%	14.0%
Female	27.2%	23.7%	13.3%
Spanish Origin	22.8%	14.1%	10.8%
Male	24.1%	13.8%	12.5%
Female	21.7%	14.3%	9.2%

Source: Table 1, Current Population Reports, "School Enrollment -- Social and Economic Characterisitcs of Students: October 1978," Series P-20, No. 346, October 1979.

Table 4

Educational Attainment at Age 25-29 for Cohorts Born 1938-1952. Percent of Cohort Attaining each Level

	4 Years High School	2 Years College	4 Years College	5+ Years College
1967 data				
25-29 year-olds (born 1938-1942)				
white male	74.3	-	18.3	7.8
white female	75.3	-	12.7	2.6
black male	51.6	-	4.2	.9
black female	55.0	-	6.3	1.0
1972 data				
25-29 year-olds (born 1943-1947)				
white male	82.3	34.6	23.2	9.9
white female	80.7	25.7	16.7	4.6
black male	61.8	13.6	7.1	2.2
black female	66.0	16.9	9.3	2.0

Table 4 (cont'd)

	4 Years High School	2 Years College	4 Years College	5+ Years College
1977 data				
25-29 year-olds (born 1948-1952)				
white male	87.5	43.1	28.4	10.8
white female	85.9	34.0	22.1	6.4
black male	77.5	24.6	12.8	4.0
black female	72.1	21.5	12.5	3.9
Hispanic male	62.0	18.2	7.1	4.1
Hispanic female	54.7	14.8	6.4	1.7

Source: Current Population Reports, "Educational Attainment in the United States," Series P-20, Nos. 169, 243, 314.

Tables 5 and 6 present some data for looking more closely at the institutions different groups attend as well as their enrollment and attainment rates. Table 5 summarizes the educational history of the high school class of 1972 from 1972 to 1976 by sex and race. It shows that at least 45 percent of each group enrolled in some form of post-secondary education directly after completing high school, with Hispanic males enrolling at the lowest rates and white males at the highest. Females in every group had a higher combined enrollment rate in two-year, vocational-technical and other schools than that of their male counterparts; male students, however, enrolled at higher rates in four-year colleges. The greatest disparity in enrollment rates is in four-year colleges. Whites enroll at rates at least 10 percent higher than blacks and 15 percent higher than Hispanics.

By the fall of 1973, enrollment rates for the class were lower than in fall of 1972 by about 9 percentage points. The enrollment rate for white males dropped the least, that for Hispanic females dropped the most. Enrollment rates in four-year colleges, however, dropped only about three percentage points, with no noticeable differences between the groups.

By October 1976, 14 percent of the class of 1972 had graduated from college. Twice as high a proportion of whites as blacks had graduated from four-year colleges and four (4) times as many whites as Hispanics graduated. White women had the highest four-year college graduation rates. Whites also graduated from two-year colleges in greater proportions than other groups, although here group differences are not so great. Blacks

Table 5

Educational Progress of the High School Class of 1972

	Total Class	White Males	White Females	Black Males	Black Females	Hispanic Males	Hispanic Females
High School Graduates	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percent enrolled fall 1972: total	53.9	56.0	54.9	44.7	50.3	45.5	47.1
in 4 yr college	29.1	32.1	29.3	22.4	26.2	15.0	15.2
in 2 yr college	14.7	15.5	14.4	12.2	9.9	23.5	17.0
in voc tech	7.5	5.8	9.1	6.8	10.7	3.7	10.1
in other schools	2.7	2.7	2.2	3.3	3.5	3.1	4.9
Percent enrolled fall 1973: total	45.0	48.6	43.0	34.9	40.1	35.3	34.8
in 4 yr college	26.3	29.1	26.1	19.5	23.1	14.4	13.3
in 2 yr college	12.5	13.3	11.8	8.9	10.0	17.6	15.4
in voc tech	5.0	5.0	4.9	5.2	6.4	2.6	5.4
in other schools	1.2	1.2	1.1	1.3	.7	.7	.8
N = 8980							
Percent 4 yr college graduates prior to Oct. 1976	14.4	15.0	16.7	6.8	10.3	3.3	3.7
Percent 2 yr college graduates prior to Oct. 1976	6.4	7.1	6.8	2.3	3.1	5.3	5.6
Percent receiving certificate prior to Oct. 1976	15.6	16.1	14.3	19.3	19.5	20.4	15.3
Percent receiving license prior to Oct. 1976	6.0	5.9	6.6	4.3	3.9	7.2	2.9
Percent receiving 2 or 3 yr Voc. degree prior to Oct. 1976	3.5	3.8	3.7	2.3	3.6	1.6	1.7
Percent enrolled fall 1976: total	23.7	28.2	19.7	33.8	22.3	21.7	20.9
in 4 yr schools	14.9	18.6	12.2	11.9	23.9	23.6	10.0
in 2 yr schools	4.1	3.9	3.7	4.8	4.1	5.6	8.8
in Voc Tech	2.6	2.8	2.2	3.6	3.3	1.9	0.7
in other schools	0.5	0.5	0.5	0.9	0.3	0.3	0.6
in grad or prof	1.7	2.4	1.2	1.6	1.7	1.3	0.9

Source: Tabular Summary of the Third Follow-up Questionnaire Data, National Longitudinal Survey

and Hispanics had received certificates more often than whites, but whites received proportionately more licenses and vocational degrees.

In the fall of 1976, about a quarter of the class was still (or again) enrolled in school. About half of those were in four-year colleges, indicating that a substantial proportion of students were taking more than four-years to finish college. The relatively high enrollment rates for women and minorities in four-year colleges suggest that their ultimate graduation rates are likely to be higher than those recorded in October 1976. The higher enrollment rate for white males, however, suggests that they are likely to catch up with white females and to remain well ahead of the minority groups. White males were also enrolled in graduate and professional schools at substantially higher rates than other groups. Despite their higher college graduation rates, white females were enrolled in graduate and professional school at only half the rate of white men.

Census enrollment data for 1976 -- which give larger numbers but not the ability to trace progress in a cohort -- show similar patterns of attendance by sex and race (Table 6).

Table 6

Distribution of Enrollment among Types of Institutions, by Race and Sex, 1976

	Total	White Men	White Women	Black Men	Black Women
All Institutions	100.0%	100.0%	100.0%	100.0%	100.0%
Public Institutions	78.6	77	79	80	81
4-Year Institutions	44.5	46	45	39	42
Universities	18.9	21	19	10	10
Other 4-Year	25.6	24	26	29	32
2-Year Institutions	43.1	31	34	41	39
Private Institutions	21.4	23	21	20	19
4-Year Institutions	20.2	22	20	18	17
Universities	6.4	7	6	4	4
Other 4-year	13.9	15	14	14	13
2-Year Institutions	1.2	1	1	2	2
4-Year, Public & Private	64.7	68	65	57	59
2-Year, Public & Private	35.3	32	35	43	41

Source: Current Population Reports, "School Enrollment -- Social and Economic Characteristics of Students: October 1976," Series P-20, No. 319, February 1978.

Table 7

Participation of High School Class of 1972 in Postsecondary Education, by Race, Sex, and Parental Income Level: 1972

			Percentage Attending Educational Institutions			
	Total	Percent not in School	Voc/ Tech School	2-year college	4-year college	other school
White males						
under $3,000	100.0	69.8	3.1	6.1	15.8	5.2
$3,000-$7,499	100.0	56.6	7.7	14.0	19.6	2.2
$7,500-$10,499	100.0	49.2	7.3	14.0	27.3	2.1
$10,500-$13,499	100.0	42.5	5.9	19.9	29.2	2.5
$13,500-$18,000	100.0	31.7	6.1	17.9	42.5	1.7
over $18,000	100.0	26.0	2.8	17.8	51.6	1.8
White females						
under $3,000	100.0	61.6	11.3	14.1	12.5	.4
$3,000-$7499	100.0	55.3	10.2	13.0	19.0	2.4
$7,500-$10,499	100.0	49.2	10.0	12.9	26.3	1.6
$10,500-$13,499	100.0	44.1	10.2	13.5	30.5	1.7
$13,500-$18,000	100.0	32.3	8.1	20.4	37.8	1.4
over $18,000	100.0	22.7	3.5	15.6	56.5	1.7
Black males						
under $3,000	100.0	58.9	10.0	7.8	21.6	1.8
$3,000-$7,499	100.0	59.3	6.7	8.4	24.3	1.3
$7,500-$10,499	100.0	39.7	6.4	18.8	32.3	2.8
$10,500-$13,499	100.0	57.4	2.0	7.2	33.4	0
$13,500-$18,000	100.0	22.9	10.4	20.5	35.0	11.2
over $18,000	100.0	42.3	6.9	9.4	41.4	0
Black females						
under $3,000	100.0	58.4	9.5	5.9	23.8	2.5
$3,000-$7,499	100.0	47.3	12.7	11.6	26.1	2.3
$7,500-$10,499	100.0	50.5	7.5	8.3	32.0	1.7
$10,500-$13,499	100.0	35.5	14.4	15.2	33.1	1.9
$13,500-$18,000	100.0	30.7	8.4	12.3	48.6	0
over $18,000	100.0	15.3	21.1	2.7	60.9	0

Note: See Technical Note E.

Source: Condition of Education, 1979, from Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972; unpublished data.

Table 7 also suggests, interestingly, that at given income levels blacks are more likely than whites to be enrolled in four-year colleges. In interpreting these data it is worth keeping in mind that many fewer blacks than whites come from higher income families.

Another source of potential disparity is geographic. Table 8 shows the substantial differences in enrollment rates by region. (State enrollment rates are shown in Appendix Table VII.) The West clearly has the highest enrollment rates for all groups. This is due in part to the extremely high enrollment rates in California. For blacks enrollment rates are lowest in the South, while for whites, the lowest enrollment rates occur in the Northeast.

Table 8 also shows the percentage of students in each region attending two-year colleges. (State data appear in Appendix Table VII.) Blacks and women attend two-year colleges in greater percentages than whites and men in all regions, but especially in the West. Interestingly, the two states with the highest enrollment rates for blacks in the 18-24 year old cohort -- California and Arizona -- also are the states in which blacks attend two-year colleges at the highest rates.

Figure 3 and Appendix Table V presents data on enrollment in law, medicine, business and graduate programs. They show that both women and minorities are substantially underrepresented in all four programs, though the position of both has improved considerably over the last ten years.

Table 8

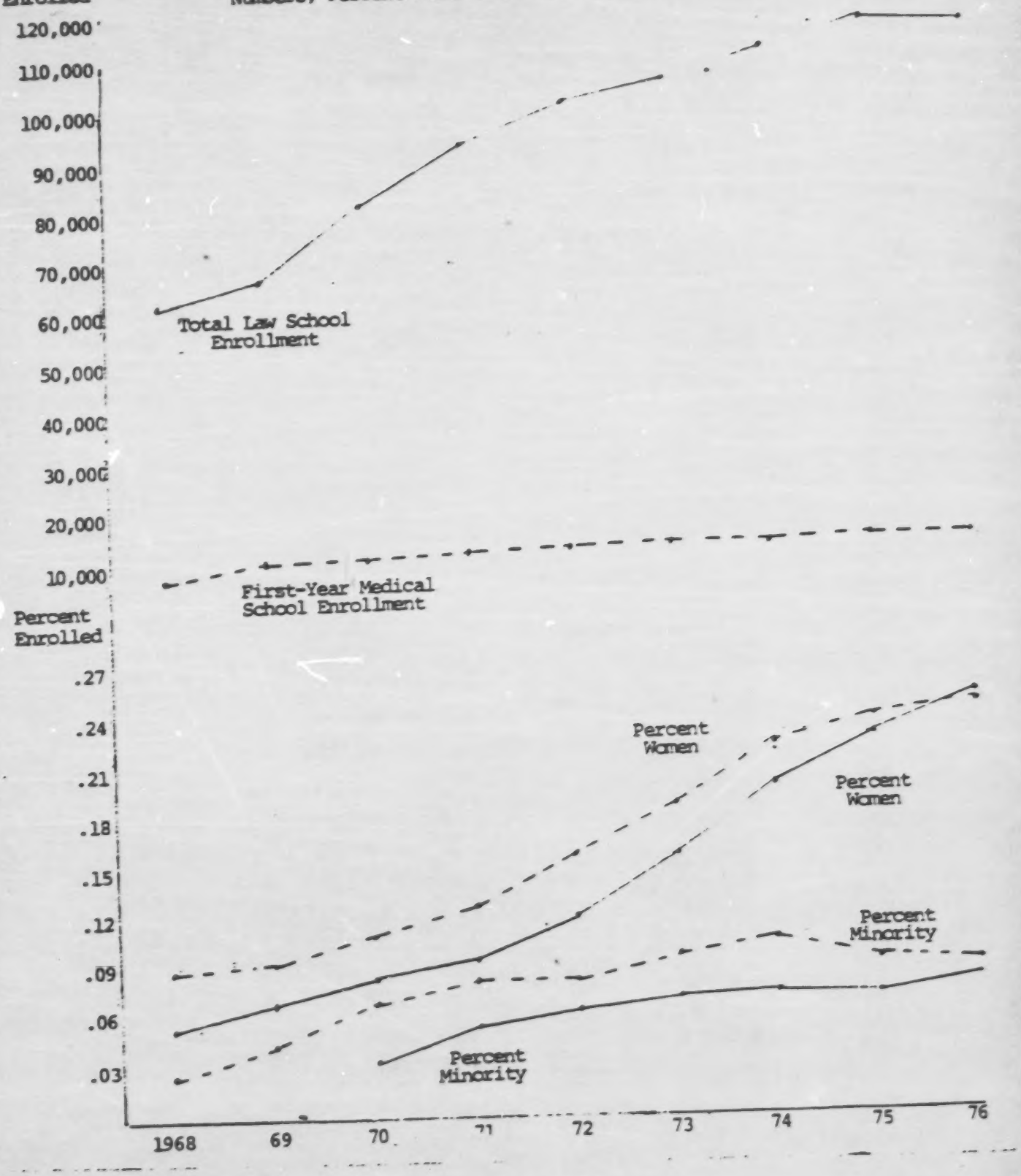
College Enrollment as a Proportion of Total
18-24 Year Old Population, 1976
by Race, Sex and Region

	Northeast	North Central	South	West
Total enrollment	1,694,132	2,194,361	2,432,621	2,096,939
Enrollment as % of 18-24 year old population				
% blacks enrolled	23.9	26.7	22.4	42.3
% whites enrolled	26.9	30.0	27.3	37.4
% males enrolled	29.5	31.7	29.7	45.0
% females enrolled	26.4	27.7	26.3	39.5
Percent of enrollment in two-year colleges	35.4%	37.7%	39.5%	68.8
% black enrollment in two-year colleges	44.8	53.3	38.5	81.2
% female enrollment in two-year colleges	36.6	39.6	39.0	70.0

Source: Fall Enrollment in Higher Education (1976)

Figure 3

Law and Medical School Enrollment:
Numbers, Percent Women and Percent Minority



Source: Carnegie Council on Policy Studies in Higher Education, Selective Admissions in Higher Education, San Francisco: Jossey-Bass, 1977

These data support the claim that women, minorities and children of low income parents are disadvantaged in their access to higher education. Blacks and the poor are underrepresented in overall enrollment at both graduate and undergraduate levels, and overrepresented in two-year and vocational programs. Residents of some states are disadvantaged relative to others.

Understanding and explaining these data are the tasks of the next section. Is the situation described by these data inequitable? It might result from differences in preferences between groups, preferences that are themselves unrelated to past or present discrimination or unfairness. If this turned out to be the case, it would be hard to argue that remediation was called for. Or the differential enrollment rates might result from group differences in ability and motivation. On strictly meritocratic grounds, ability and motivation ought perhaps to determine access. If, however, group differences in ability and motivation result from past or present discrimination or unfairness, then the situation may still be unfair -- if more difficult to remedy. The next section will examine research that speaks to these questions.

C. <u>What Determines Attendance</u>?

Research on the determinants of college attendance suggests some answers to the questions raised in the previous section. In this section we will examine the evidence for two questions:

1. To what extent do race, sex and social class affect

Multivariate analyses: The best sources of information for analyzing what affects educational attainment are studies which follow students over time, from high school through college and into adult life. Several such longitudinal studies now exist and have been analyzed extensively. The most recent is the National Longitudinal Study of the High School Class of 1972 which collected information on a stratified sample of about 15,000 high school seniors in 1972. The analysis of this data set by Gregory Jackson[47] yields findings consistent with those of other studies; because it is clear and uses relatively recent data it will be the focus of discussion.

Jackson's analysis used eight composite variables to explain whether a senior in 1972 was enrolled in college eighteen months later. The composite variables were:

1. Place: white collar occupational distribution; tight labor market; number, percent public and average cost of post-secondary institutions; region;
2. Background: parents' income; socioeconomic status; race; whether religious upbringing;[48]
3. School: high school curriculum offerings; racial composition and educational plans of student body;
4. Student: test score; academic track; grades; parents' aspirations for student;
5. Friends: whether friends plan to go to college;
6. Occupation: occupational aspirations;
7. Aspiration: educational aspirations;
8. Plans: plans for next year, if there were no obstacles.

Jackson found that family background was an important predictor of college attendance, and that place and school variables were relatively unimportant after background was taken into account. (Equations and coefficients from his discriminant analysis are reproduced in Appendix Table VIII.) When student characteristics -- test scores, grades, track and parents' aspirations -- were added to the equation, however, the effects of background diminished markedly. Background appears to affect attendance primarily by affecting these other characteristics.[49] When plans were added to the equation they became by far the best predictor of college attendance. The effects of student characteristics declined to about a third their previous importance, and the effects of background diminished even further. Students' assessments of their characteristics (and perhaps others' assessments of their characteristics) shaped their plans,[50] which in turn shaped their behavior. It is important to note, however, that even when the analysis included both student characteristics and plans, background exerted an independent, statistically significant impact on the probability of attending college.

Jackson's analysis, which is generally supported by others, suggests that the race and class disparities in college attendance documented in Tables 3-7 are explained to a substantial extent, though not completely, by differences in student characteristics, aspirations and plans. (The term "explained" is used here in its statistical sense, and is not meant to imply justification.) We turn, therefore, to the important though controver-

sial issues of motivation and ability. To pursue the direct effects of income level on attendance, we later look at the research on college costs.

Applications and admissions. One important question for understanding the process leading to underrepresentation of minorities and the poor in higher education is whether those groups apply to college in lower proportions or are disproportionality rejected for admissions.

The National Longitudinal Study of the High School Class of 1972 suggests that nearly all undergraduate applicants are admitted to at least one school -- most, indeed, to their first choice. While 11.5 percent of blacks and 7.8 percent of whites were rejected by their first choice school, less than 3 percent of all blacks and only 2 percent of all whites who applied to college were not accepted anywhere.[51] This means that the overall applicant pool looked almost exactly like the pool of admitted students and suggests that disproportionate enrollment reflects either disproportionate applications, disproportionate rates of registration after admissions, or disproportionate drop-out rates.

All three appear to be involved. One factor influencing application rates is high school completion; as was noted earlier, about 25 percent of blacks and 15 percent of whites had dropped out of the high school class of 1972 before graduation (Appendix Table III). Of high school graduates, blacks applied to colleges at slightly lower rates than whites: 48.8 percent of blacks applied to at least one college compared to 51.5 percent

of whites.[52] Among those accepted by their first choice colleges, 53 percent of blacks and 68 percent of whites actually attended.[53] As was shown earlier (Table 3) blacks who do attend are more likely to be enrolled in two-year programs and more likely to drop out before completing their programs. The combination of these differentials culminate in racial differences in college graduates. For the class of 1972, 19.2 percent of white high school graduates had received a bachelor's degree by 1977, while only 12.1 percent of the blacks had received their degrees. More dramatically, in 1977, 28 percent of white 25-29 year olds were college graduates compared with 13 percent of black 25-29 year olds.

The importance of application and admission rates in determining the distribution of students among institutions can be partially examined with available data. For the thirty highly selective private colleges that constitute the Consortium on Financing Higher Education (COFHE: members include the Ivy League and Seven Sisters colleges, Carleton, Duke, Johns Hopkins, MIT, Trinity, University of Chicago, Vanderbilt, etc.), minority students in 1974 were 11.1 percent of applicants, 10.8 percent of accepted applicants and 10.8 percent of enrolled freshman[54] compared with 12.7 percent of the 18-24 year old age group and 14.1 percent of college freshman nationally.[55] The underrepresentation of minority students in the COFHE colleges is almost entirely due to underrepresentation among applications.

(COFHE institutions admitted, on the average, 45 percent of their 1974 applicants. In 1973 and 1974, 69 percent of all COFHE applicants were accepted in at least one COFHE institution.)

The picture is a bit different for law and medical school. In 1976, about 57 percent of all applicants to ABA approved law schools were admitted to at least one school (Table 9). Blacks made up 6 percent of the applicant pool but only received 4 percent of the total offers; 39 percent of the black applicants and 59 percent of white applicants were admitted. For law schools, therefore, minorities were not only underrepresented in the applicant pool, but were also admitted in lower proportions than whites. In contrast, women were admitted in higher proportions: 60 percent of female applicants, who made up 28 percent of the applicant pool, were admitted to at least one law school.[56]

In medical schools, it appears that disproportions arise primarily in the applicant pool and are corrected to a slight extent by the admissions process.

In 1975, about 36.6 percent of all medical school applicants were admitted to at least one school. Blacks were admitted at the rate of 41.3 percent of applicants and Chicanos at 51.5

Table 9

Acceptance Rates for Selected Professional Schools

Law Schools (1976)

Group	Applicants	% of Applicant Pool	Offers	% of Offers Pool	Acceptance Rate
Total	76,061	100%	43,513	100%	57%
Men	54,473	71.6	30,531	70.2	56%
Women	21,588	28.4	12,953	29.8	60%
Blacks	4,299	5.7	1,697	3.9	39%
Chicanos	1,085	1.4	510	1.2	47%
Unspecified Minorities	3,683	4.8	1,892	4.3	51%
Whites	66,994	88.1	39,284	90.3	59%

Source: Frank Evans. Applications and Admissions to ABA Accredited Law Schools: Fall 1976 (Princeton, N.J.: Law Schools Admissions Council, May 1977).

Table 9 (cont'd)

Medical Schools (1975)

Group	Applicants	% of Applicant Pool	Offers	% of Offers Pool	Acceptance Rate
Total	42,303	100.0%	15,365	100.0%	36%
Men	26,926	63.7%	11,677	76.0%	43%
Women	15,377	36.3	3,688	24.0%	24%
Blacks	2,288	5.4	945	6.2%	41%
Chicanos	427	1.0	220	1.4%	52%
Unspecified Minorities	3,188	7.5	959	6.2%	30%
No Response	1,532	3.6	256	1.7%	17%
Whites	34,868	82.4	12,985	84.5%	37%

Source: T.L. Gordon. Descriptive Study of Medical School Applicants 1975-76. (Washington, D.C.: Association of American Medical Colleges, 1977).

percent; they made up 5.4 percent and 1.0 percent, respectively, of the applicant pools. In comparison, 37.2 percent of white applicants were accepted. (Asian Americans, Puerto Ricans, Cubans and others were admitted at below average rates.)[57]

As a final example of the relative importance of applications and admissions rates, we can use Lavin, et al.'s analysis of the City University of New York in 1972. At that time high school graduates with 80% averages or in the top halves of their classes were guaranteed places somewhere in the system, but both student preferences and admissions decisions determined whether their places would be in the four elite senior colleges (defined by the authors as Brooklyn, City College, Hunter and Queens), the five non-elite senior colleges or the eight community colleges. In 1972, minorities made up 34.8 percent of entering freshman: 23.0 percent at elite senior colleges, 34.1 percent at non-elite senior colleges and 43.8 percent at community colleges. Expressions of preferences and admissions rates are presented in Table 10. The table suggests that preferences were an important determinant of where students ended up. In addition, however, differential admissions rates existed, especially in the elite senior colleges.

These pieces of data hardly present a complete picture of applications and admissions processes in U.S. higher education. It would be very useful to have data from state university

Table 10

College Preference and Rate of Admission to Preferred Level by Ethnic Group, City University of New York, 1972

	Percent Preferring		
	Elite Senior	Other Senior	Community
Whites	42	13	45
Blacks	22	11	67
Hispanics	21	12	67

	Rate of Admission to Preferred Level		
	Elite Senior	Other Senior	Community
Whites	51	69	100
Blacks	32	60	100
Hispanics	49	75	100

Source: Lavin, David E., Richard D. Alba and Richard A. Silberstein, "Open Admissions and Equal Access: A Study of Ethnic Groups in the City University of New York," Harvard Educational Review, Vol. 49, No. 1, February 1979, pp. 53-92

systems; it would be useful to have any data on application and admissions rates by family income.

Nonetheless, the available data suggest a few conclusions. First, group differences in application rates seem to be more important than differences in admissions rates in influencing enrollment. Understanding application decisions will be crucial for designing remedial programs. Second, at least some kinds of institutions admit somewhat lower proportions of minority than of majority applicants. The reasons for this -- and the reasons that other institutions, like medical schools, admit higher proportions of minority applicants -- also need to be understood. Third, group differences in enrollment rates after acceptance and in drop-out rates after enrollment are also very important determinants of differential graduation rates. How schools attract and hold the students they admit is thus another important area for study.

Self Selection. The data summarized above on applications and admissions suggest that high school students sort themselves into college-goers and non-college goers before they reach the stage of applying to college. The colleges in the aggregate add very little to this sorting process, since almost everyone who applies is accepted. High school students also sort themselves fairly efficiently into types of colleges and even into specific institutions. In 1978, 37 percent of enrolled college freshman had applied to only one college and an additional 18 percent had applied to only two. Seventy-six percent reported that they were attending their first choice college.[58] Among the high school

class of 1972, surveyed by the National Longitudinal Study, Jackson found that just over half the applicants filed only one application.[59] He also found that the schools applied to by multiple applicants were very similar to each other in offerings, prestige, academic quality and price.[60] That considerable self-selection takes place is further documented by the fact that almost 70 percent of 1973 and 1974 applicants to the prestigeous COHFE institutions were admitted to at least one of them.[61]

How does the process of self-selection, not only into college but also into particular institutions, take place? It seems clear from the multivariate analyses of educational attainment reported above and in the appendix that academic ability as measured by test scores and high school grades are extremely important, as are occupational and educational aspirations. Family income, race, sex and other background variables are important mainly through their influence on scores, grades and motivation; their independent effects, however, may derive from assessments by students and their families of whether they can afford the cost of college.

The process by which all this happens has not been adequately studied and is probably quite complex. One possibility is that students accurately perceive and anticipate the admissions and financial aid decisions of colleges. Because colleges value high test scores and grades, students with low test scores and grades "know" they will not be accepted and therefore do not apply. Because colleges have limited financial aid, only higher income students and low income students with very good records apply to

expensive institutions. Students therefore sort themselves into the institutions where they are fairly sure they will be accepted. Where they end up does not necessarily reflect genuine preferences, although expressions of preferences may rationalize actual positions. If this account were true, changes in enrollment patterns could be effected by changes in admissions policies, after a suitable length of time for diffusion of information.

Another possiblity is that the process works less directly, with preferences playing a more important role. Students with talents and temperaments to do well in school, enjoy school (partly because they do well in it) and aspire both to more school and to the kinds of occupations that require the same kinds of talents and temperaments as school. They genuinely prefer going to school over their other alternatives, and the more academically able among them prefer more intellectually difficult schools. Those less enanmored of school prefer the shorter, more practical programs of community colleges and less prestigious institutions. Because less of their lives is invested in school they choose local institutions in order to maintain work and friendship patterns. Enrollment patterns thus reflect preferences, and the high rates of reported attendance at "first choice" schools are real. If this account were true, admissions policies would reflect but would not cause students' assessments of where they would do well and be happy.

Some evidence exists that describes students' reasons for not enrolling in post-secondary education and for dropping-out. Students in the NLS who were not enrolled in post-secondary education were presented with a list of "reasons others have given for not continuing their formal education" and asked which applied to them. The most often cited reason was wanting to earn money for self (65.11 percent) followed by wanting to take a break from school (50.72 percent). More than 30 percent agreed that they wanted practical experience, needed to earn money to apply for college, could not afford college or were offered a job they wanted. All the economic reasons were cited more often by blacks than by whites. Only about 11 percent said that poor grades or test scores kept them from colleges. Only 3 percent cited the lack of a college within commuting distance as a factor, or said that they were discouraged by parents, counselors or teachers.[62]

By the fall of 1973, almost half (47 percent) of those students enrolled in post-secondary programs had withdrawn. The reasons most often given were financial difficulties (27.15 percent), wanting to get practical experience (29.34 percent), and failing or doing poorly (24.23 percent). Black students cited financial difficulties as their major reason for leaving school (41.17 percent) whereas white students listed the desire to get practical experience (29.97 percent).[63] Of those students continuing their post-secondary education beyond 1973, 26 percent withdrew by the fall of 1974. Again, black students attributed

this decision most often to financial difficulties (45 percent) while white students selected "wasn't really sure what I wanted to do" (44.9 percent) as the major factor.[64]

It would seem, then, that in thinking about policy, attention should be paid not only to admissions and financial aid policies but also to the whole process by which school success and the motivation to continue develop. Elementary and high school teachers and counselors may well be implicated here, not only because of the direct advice they give students about college but also as a result of their role in decisions about grades, track placement and the help and encouragement that students receive. If these decisions reflect class and racial biases, or behavior patterns and expectations stacked against minorities and the poor, they may contribute to the differentials we observe in higher education.

Test scores and group differentials. Up to this point, test scores have been discussed only as a general determinant of educational attainment. Because they present the most difficult issue in thinking about group differentials, however, we must now look more closely at the role they play.

Scores on standardized tests of all types vary by race and class. Data on Scholastic Aptitutde Test (SAT) scores by parental income are presented in Table 11. The table shows that mean SAT scores range from 403 for the lowest income group to 485 for the highest; mean income by SAT score group shows an equally clear and consistent pattern. Test score differences by race are even more dramatic.

Table 11

Parental Annual Income by SAT Average, Both Sexes Combined (1973-74 SDQ Question 27)
647,031 Students Responding (Percentages in this Table Based on this Number)

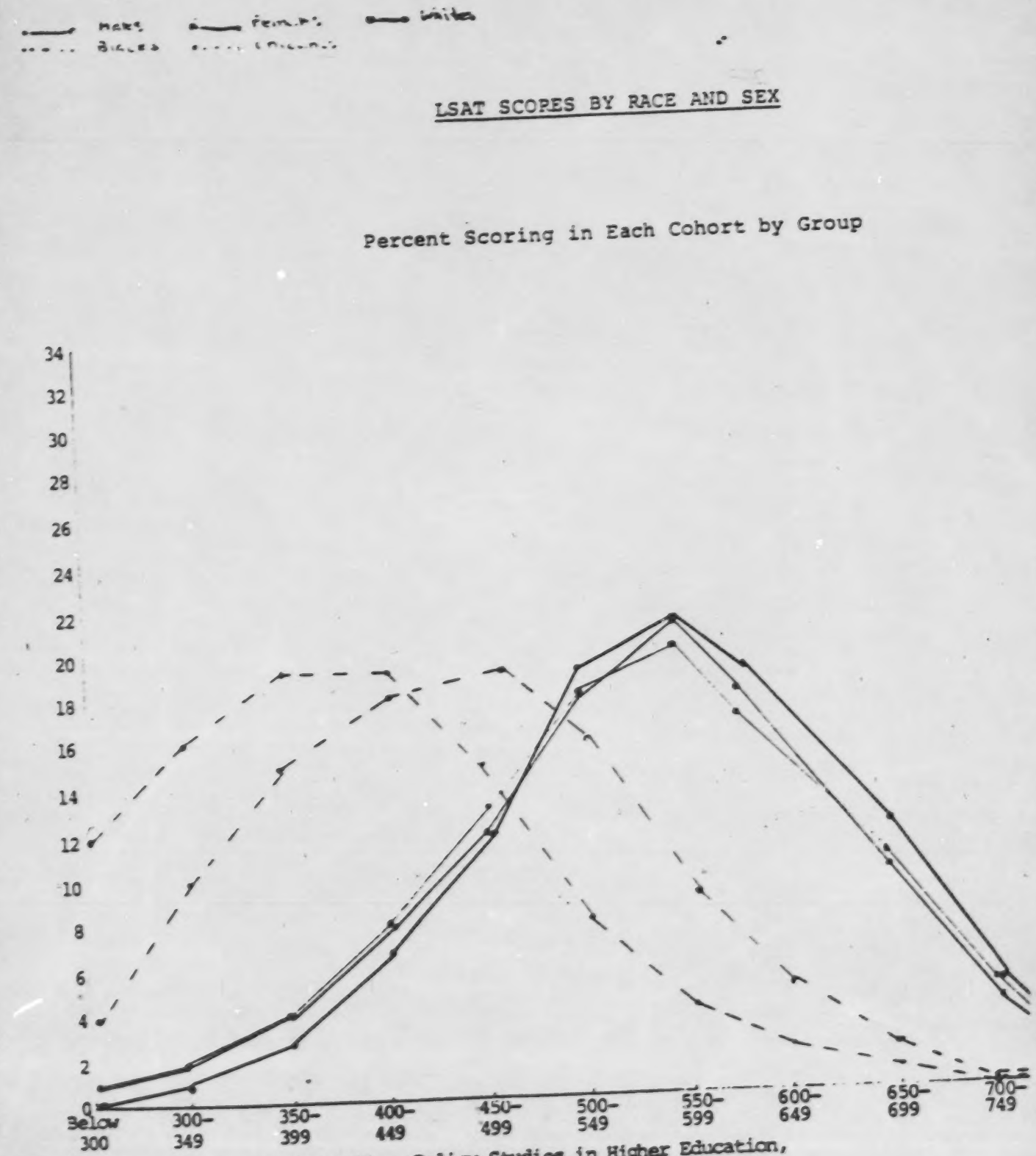
SAT AVERAGE	UNDER $6,000 PCT	$6,000-$8,999 PCT	$9,000-$11,999 PCT	$12,000-$13,499 PCT	$13,500-$14,999 PCT	$15,000-$17,999 PCT	$18,000-OR OVER PCT	TOTAL PCT	MEAN INCOME
750-800	0	0	0	0	0	0	0	0	$24,124
700-749	0	0	0	0	0	0	1	1	$21,980
650-699	0	0	0	0	0	0	1	3	$21,292
600-649	0	1	1	1	0	1	3	6	$20,330
550-599	0	1	2	1	1	1	4	11	$19,481
500-549	1	1	3	1	1	2	6	15	$18,824
450-499	1	2	3	2	1	2	2	18	$18,122
400-449	1	2	3	2	1	2	6	17	$17,387
350-399	1	2	3	1	1	2	4	14	$16,182
300-349	1	2	2	1	1	1	2	9	$14,355
250-299	1	1	1	0	0	0	1	4	$11,428
200-249	0	0	0	0	0	0	0	1	$ 8,639
Total	6	12	18	9	6	11	34	99	$17,563
Mean Score	403	435	455	464	469	473	485	462	

Source: College Bound Seniors, 1973-1974, College Board

Figure 4, for example, shows the distribution of scores on the Law School Aptitutde Test (LSAT) by race. About 66 percent of blacks and 47 percent of Chicanos compared with 11 percent of whites scored below 450; while 2 percent of blacks, 2 percent of Chicanos and 18 percent of whites scored above 650. Scores on tests of various kinds given at various ages (after about age 10) are highly correlated with each other. Race and class differentials are similar for standardized ability tests given in elementary and high school, SATs, LSATs, MCATs, etc.

Though all of these test are called ability tests, none of them measure pure ability as distinct from reading speed and comprehension, vocabulary, general knowledge and other learned skills. Nor can the tests claim to measure an innate, genetically fixed quality. Although there may be a heritable component to test scores, differences in environnt contribute substantially to the variation. Whatever it is that test scores measure, however, is predictive of success in school. (This is not surprising since the tests were designed to produce the highest possible correlations with school grades and teacher evaluations.) The tests seem to be about equally valid predictors of school success for majority and minority students.[65] The tests' predictive validity is the justification for their use as part of an admissions procedure and as aids in counseling.

Figure 4



Source: Carnegie Council on Policy Studies in Higher Education, Selective Admissions in Higher Education, San Francisco, Jossey-Bass, 1977

Racial differences in average test scores do not seem to be accounted for by blatant or easily correctable item biases. Many studies have been done, mostly by the Educational Testing Service which produces the tests, to look for standardized test items that are differentially difficult for racial groups. The studies show, however, that such items are hard to find and that of the few that exist about as many are biased against whites as against blacks.[66] Blacks' lower average scores seem to result from difficulty with the tests generally rather than with particular items. That the tests generally reflect middle-class American culture, rather than black or Hispanic culture, is indisputable. Schools and economic institutions also reflect middle class culture, however, and although it is theoretically possible to design tests that embody other cultural outlooks and knowledge, they are poor predictors of success in school.

The low average test scores of minorities may also help to explain why they are underrepresented among applicants to selective colleges and professional schools. Minorities may not apply because they think low test scores will prevent their being admitted. Or they may have found test scores a handicap at other stages of the educational process: in tracking and curriculum placement, high school graduation, college application, and so on. Or low test scores may reflect (rather than cause) inadequate educational preparation in elementary and secondary school which makes going on seem impossible.

Table 12

Fall 1972 postsecondary educational attendance: Percentages by race and ability, and institutional selectivity

Ability quartiles[a]

Type of college	Black Low 1	Black 2	Black 3	Black High 4	White Low 1	White 2	White 3	White High 4	Hispanic Low 1	Hispanic 2	Hispanic 3	Hispanic High 4
Four-year	15.5	42.2	54.7	73.8	6.4	15.0	33.7	61.3	9.6	20.2	33.8	52.1
Two-year	10.1	11.3	10.5	4.6	10.7	17.4	18.9	13.2	19.4	30.2	26.4	26.3
Total	25.6	53.5	65.2	78.4	17.1	32.4	52.6	74.5	29.0	50.4	60.2	58.4

Ability

Selectivity levels[b]	Black Low	Black Medium	Black High	Black Levels	White Low	White Medium	White High	White Levels
Low 0,1,2	77.5	75.0	51.7	70.9	69.0	55.3	43.5	49.2
Middle 3,4	18.9	16.0	5.2	17.3	30.7	36.1	32.9	33.5
High 5,6,7	3.6	9.0	43.1	11.8	0.3	8.6	23.5	17.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a Student ability based on composite test scores in vocabulary, reading, letter groups, and mathematics.

b Undergraduate institutions are classified on the basis of the average academic ability level of the entering freshman class as follows:

Source J.P. Bailey, Jr., and E.P. Collins, "Entry into Postsecondary Education." In J.P. Bailey, Jr. (Chair.). National Longitudinal Study of the High School Class of 1972 Symposium: Trends in Postsecondary Education. Symposium presented at the annual meeting of the American Educational Research Association, New York, 1977, p.17

These possibilities raise questions about the use of test scores in admissions and counseling. We might well ask what would be lost, if anything, if test scores were not used, and what would be gained in terms of minority access. In a recent study, it was estimated by the Law School Admission Council that "if numerical predictors were employed exclusively for all applicants...the percentage of blacks among first-year law students would drop to between 1 percent and 2 percent from the current 5.3 percent, and the percentage of Chicanos would fall to between 0.4 percent and 0.8 percent from the current 1.36 percent."[67] This suggests that other admissions procedures must be developed if minority representation is to increase significantly. Because test scores are, however, somewhat predictive of school success, losses might come in the accuracy of the predictions that admissions offices would be able to make about whether students will stay in school and do well. This leads to two questions: first, how much loss of predictability would there in fact be; and second, how important is predictability.

There are costs to both the individuals involved and to society when students who simply cannot do the work are admitted to undergraduate or professional training: they drop out or fail, in effect wasting institutional resources and probably damaging their own self-esteem as well. There are also costs when students who could do the work are not admitted: the students lose their chances and the society loses their contributions. It is clearly useful to minimize both those kinds of losses at the admissions stage, and thus to have a procedure

Table 13

Number and percentage of candidates at or above selected LSAT and UGP levels and number and percentage who received at least one offer of admission to an LSDAS-ABA law school.

Average Law School Admission Test Score

Level	Black No.	%	Number accepted[a]	%[b]	%[c]	Chicano No.	%	Number accepted[a]	%[b]	%[c]
LSAT ≥ 600	142	3	122	86	7	80	7	71	89	14
LSAT ≥ 500	811	19	658	81	39	354	33	278	79	55
LSAT ≥ 450	1,437	33	1,051	73	62	562	52	400	71	78
UGPA ≥ 3.25	556	13	409	74	24	243	22	186	77	36
UGPA ≥ 2.75	1,929	45	1,123	58	66	615	57	392	64	77
UGPA ≥ 2.50	2,805	65	1,424	51	84	815	75	459	56	90
LSAT ≥ 600 and UGPA ≥ 3.25	39	1	38	97	2	38	4	35	92	7
LSAT ≥ 500 and UGPA ≥ 2.75	461	11	425	92	25	251	23	225	90	44
LSAT ≥ 450 and UGPA ≥ 2.50	1,040	24	862	83	51	466	43	369	79	72
Total	4,299	100	1,697	39	100	1,085	100	510	47	100

Level	Unspecified minority No.	%	Number accepted[a]	%[b]	%[c]	White and unidentified No.	%	Number accepted[a]	%[b]	%[c]
LSAT ≥ 600	786	21	657	84	35	24,468	37	20,814	85	33
LSAT ≥ 500	2,068	56	1,470	71	78	51,307	77	36,365	71	93
LSAT ≥ 450	2,656	72	1,721	65	91	59,359	89	38,541	65	98
UGPA ≥ 3.25	1,178	32	856	73	45	26,753	40	21,301	80	54
UGPA ≥ 2.75	2,523	69	1,562	62	83	50,316	75	34,176	68	87
UGPA ≥ 2.50	3,053	83	1,749	57	92	58,420	87	37,182	64	95
LSAT ≥ 600 and UGPA ≥ 3.25	387	11	353	91	19	13,151	20	12,082	92	31
LSAT ≥ 500 and UGPA ≥ 2.75	1,615	44	1,256	78	66	40,906	61	31,625	77	61
LSAT ≥ 450 and UGPA ≥ 2.50	2,325	63	1,599	69	85	52,868	79	36,353	69	93
Total	3,683	100	1,892	51	100	66,994	100	39,284	59	100

[a] Estimated

[b] Percentage of the group at that level who were offered admission.

[c] Number at or above the level who were offered admission expressed as a percentage of the total of the ethnically defined group who were offered admission.

Source: F.R. Evans, Applications and Admissions to ABA Accredited Law Schools: Fall 1976, Princeton, N.J.: Law School Admission Council, May 1977 (p.36).

which can at least roughly distinguish applicants who can do the work from those who cannot. The use of test scores contributes modestly to this goal. A study at four California colleges suggests, however, that an admissions procedure which eliminated the use of test scores in favor of grades would make almost the same number of prediction errors on success or failure as a procedure which also used test scores.[68] The grades-only procedure would, however, increase the representation of minorities. It would also, the authors claim, change the character of prediction errors, increasing the number "wrongly" let in but decreasing the number wrongly kept out.

The use of test scores as a measure of predictive success in graduate school has also recently been questioned. Several studies comparing medical school grades to MCAT subtest scores reveal little correlation between the two. In fact, these findings suggest that despite an average gap of 105 to 155 points between the MCAT scores of admitted black and white students, black students did as well as white students in medical school.

If these analyses are correct, the use of test scores in admissions could be largely eliminated without much changing the ability of colleges to distinguish applicants who can do the work from those who cannot. At selective colleges and professional schools, however, admissions procedures are meant to do more than that: they purport to select from among all those able to do the work those best able to do the best work. The use of test scores in admissions advances this goal. It is, however, a less clearly reasonable goal than that of screening out applicants unable to

pass. Most of the research on occupational competence suggests that it is not necessarily the best law students who become the best lawyers, the best medical students the best doctors, and so on. Test scores are only slightly predictive of occupational success and income when they are analyzed independently of educational credentials.[69] Thus schools cannot claim that their selection procedures produce the most competent professionals, even if they did produce the best student bodies.

The advantages of procedures aimed at selecting the best students would seem to be two. Students who do well on tests tend to be quick, verbal, and easy to teach. They therefore make faculties happy, which in turn makes institutions operate more smoothly. Second, they enhance institutions' reputations for being selective and thus confer prestige. Because institutional quality is often equated with average test scores, admissions offices have strong incentives to select students with high scores. Neither of these advantages seems particularly weighty when balanced against the possibility of greater minority access. More thought and research about the possible benefits of eliminating testing are certainly needed.

Family income and college costs. Low income students are less likely than others to attend college at all, to attend four-year, private or selective colleges -- or to go on to graduate or professional training. Differences by income level remain even when ability and race are taken into account, as Table 14 shows (using socioeconomic status, a composite variable which includes income). Income serves to some extent as a proxy for

parental education, parental occupation and other less easily measured aspects of class or family background. Analyses which include other background measures generally find that income per se is less important than parental education or class.[70] Multivariate analyses also suggest that most of the influence of income or class comes through effects on student achievement and aspiration. Family background seems to be an important and complex part of a process in which self-perceptions are developed and decisions about education made.

These cultural considerations seem to be more important than simple determinations of whether families can afford college for their children or not. Because the cost of college relative to family income has, however, attracted a good deal of public attention, and because cost, unlike culture, can be easily manipulated by public policy, the issue is worth pursuing further. The analyses do show, after all, a small direct effect of income on educational attainment that persists even after ability, grades and aspirations are taken into account. Moreover, considerations of cost and affordability may directly or indirectly shape the advice parents offer their children and the ways students think about possibilities for going on in school.

We first ask how expensive higher education actually is to students and their families. We then go on to speculate about the difference cheaper or more easily financed education might make in the attendance rates of low income students.

Table 14

Participation Rates in Postsecondary Education for the High School Class of 1972[1], by Race, Ability Level, and Socioeconomic Status: Fall 1972, Fall 1973, and Fall 1974

Ability level and socioeconomic status (SES)[2]	Fall 1972		Fall 1973		Fall 1974	
	White	Black	White	Black	White	Black
Low ability level						
Low SES	19.8	34.0	10.9	23.9	8.7	22.5
Middle SES	29.0	42.9	20.1	35.5	14.1	29.0
High SES	46.6	61.2	36.8	51.2	31.4	49.4
Middle ability level						
Low SES	33.2	55.9	25.5	41.7	19.8	42.8
Middle SES	53.3	61.0	43.0	54.3	31.8	55.8
High SES	74.6	86.5	65.3	75.6	56.8	83.1
High ability level						
Low SES	66.2	68.6	56.7	62.0	47.2	71.4
Middle SES	77.4	74.2	68.3	82.1	56.3	89.2
High SES	92.6	91.3	86.2	72.1	81.2	78.9

1 Excludes those students who could not be classified by race, ability level, or socioeconomic status.

2 Note that the sample sizes for Blacks categorized in the high ability or high socioeconomic status cells are relatively small and subject to greater sampling error.

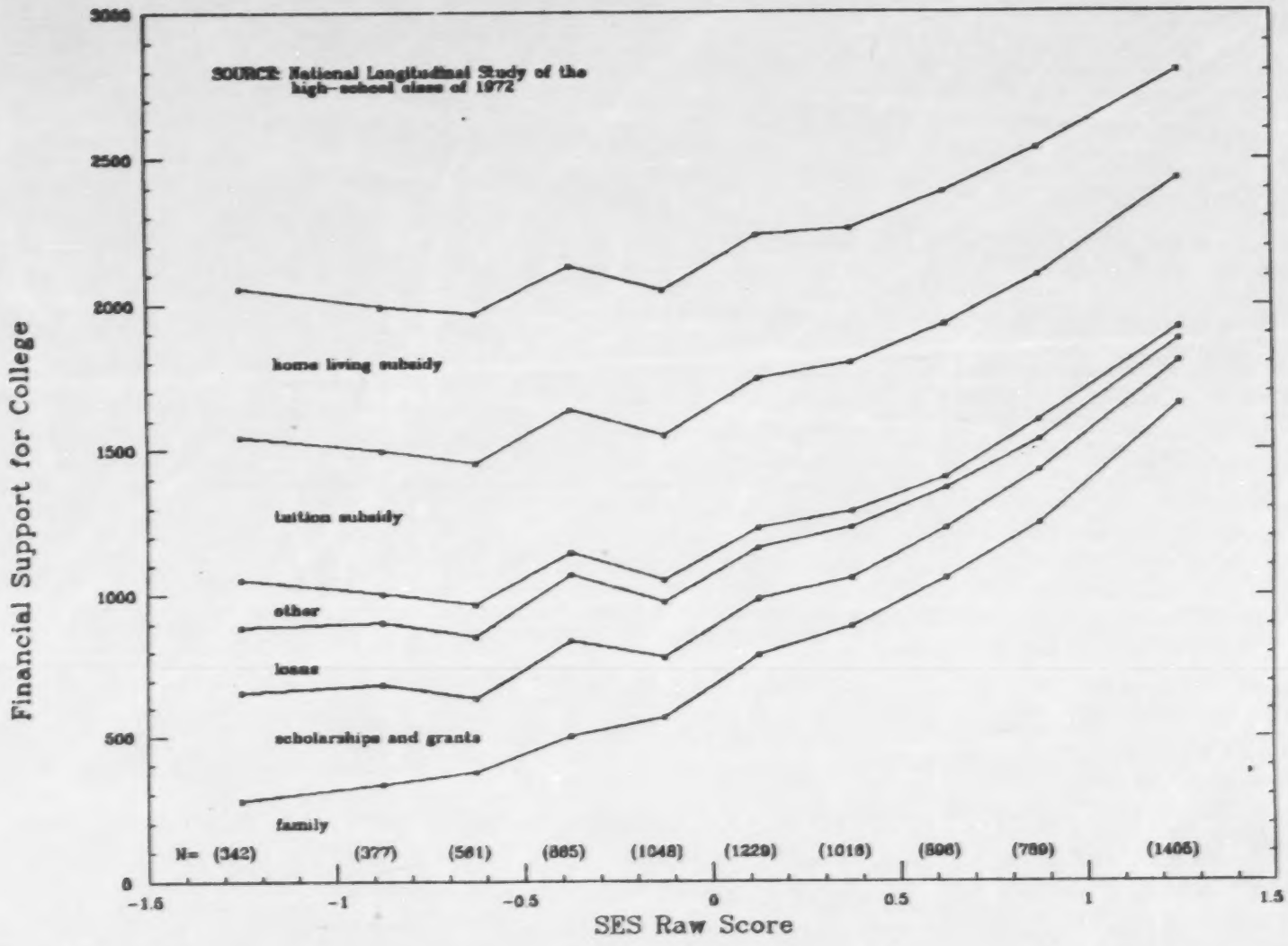
Source: National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972, preliminary data.

The costs of higher education to students and their families vary considerably by whether the institution is two-year or four-year, private or public, and by whether students live at home while attending. Figure 5 shows the average cost for 1967 to 1977 of public and private colleges. Figure 5 also shows the relationship of college costs to family income. The burden has not increased over time; although the costs of colleges, especially private colleges, have increased dramatically, family income has more than kept up.[71]

Students and their families do not, of course, pay the entire costs of higher education. They do bear the opportunity costs, the earnings that students lose because they are in school rather than working. They do not pay that part of the cost of college that is subsidized by taxes or private philanthropy; ie., the difference between what education costs and what colleges charge in tuition and fees (about half the total cost of higher education in 1977). Moreover, students and their families do not pay all of the charges left after subsidies are subtracted, since scholarships and grants of various sorts are available.

Figure 6, from an analysis of college costs by Jackson using National Longitudinal Study data, shows how college costs in 1972

Figure 6


SOURCE: National Longitudinal Study of the high-school class of 1972
Financial Support for College
3000
2500
2000
1500
1000
500
0
home living subsidy
tuition subsidy
other
loans
scholarships and grants
family
N= (342) (377) (561) (885) (1048) (1229) (1018) (806) (789) (1406)
-1.5
-1
-0.5
0
0.5
1
1.5
SES Raw Score

were paid by students from different SES levels.[72] The components of cost, cumulated in the graph, are as follows:

family contribution;

scholarships and grants, both from college and from public sources;

loans, both bank and publicly subsidized;

other, primarily student earnings and savings;

tuition subsidy to students at public and non-resident tuition;

home living subsidy from parents to students living at home, calculated as the cost of room and board to students attending similar institutions.

Several interesting findings emerge from the graph. The total cost of education is about $700 higher, on the average, for high SES than low SES students: Higher SES students attend more expensive institutions. The additional costs are financed entirely by family contributions which are much higher, both absolutely and as a proportion of total costs, for high income students. The average amount of tuition subsidy is about the same for high and low income students. This suggests that although high SESstudents are more likely to attend private institutions, when they do go to public colleges they choose the more expensive among them. Scholarships, grants and loans go disproportionately to low SES students. These students also tend to pay more of the costs of college from "other" sources, primarily their own earnings.

The data suggest that the growth of public colleges and universities and of scholarships, grants and loans has made higher education available to lower income students at a net money cost to their families of a relatively modest proportion of family income. Not all higher education is available to them: low income students attend cheaper institutions. Moreover, it is clear that low income students and their families must make greater sacrifices to finance higher education. Home living subsidies take a larger proportion of family income at the lower levels. Low income students must work more and take out larger loans. And although family contributions are about the same proportion of income at all levels, they may be more of a burden to low income families. Opportunity costs, not included in this figure, may also be more important to low income families, since children's contributions could amount to a significant proportion of family income.

Data from the NLS shows that cost was the most significant reason black students gave for withdrawing from postsecondary education (41.17 percent of the black students cited this as compared to 25.57 percent of the white students).[72] More dramatically, students from low income families were twice as likely to cite financial hardship as a factor for their leaving school (39.28 percent) in contrast to those students from high income backgrounds (19.6 percent). When students were asked whether their decision not to apply to college was affected by the cost, the above pattern of responses was repeated. Forty-five percent of the black students and 40 percent of the low

income students listed cost as a prohibitive factor in their decision to apply to college, while 32 percent of the white students and 30 percent of the high income students said that they could not afford the cost of a college education.[73]

It would seem, then, that cost may well deter some low income students from aspiring to and attending college. The exact effects of decreases in tuition or increases in student aid are, however, difficult to estimate. Recent studies using data from between 1968 and 1972 indicate that enrollments would increase by between 0.04 and 1.25 percent for every $100 reduction in tuition charges.[74] Jackson estimates that additional financial aid of 283 million dollars directed to low SES students would have drawn 92,952 more of them to college, thus increasing the total enrollment rate by 3.1 percent. This estimate, of course, makes a number of non-verifiable assumptions about how increased aid might change the motivations and aspirations of young people who have not in the past applied to college.

Location: A number of analyses suggest that institutional location is not an influential factor in a student's decision whether or not to attend college. In a study of students in Wisconsin in 1975, Christensen, Melden, and Weisbrod found that the presence of a local institution had very little effect upon males' or females' decision to attend college. This response was also found not to be significantly affected by the students'

socioeconomic status.[75] In another study in 1972, this time covering all states, college location and accessibility had little effect on student attendance -- no matter if the institution was a two-year or four-year, public or private college.[76] When Jackson controlled the number of institutions as a variable in the composite variable of "place", the beta coefficient was only .009. These findings, then, raise questions as to the importance of institutional location as a factor affecting a student's decision to attend college.

There appear to be a number of possible explanations for these results. One possibility is that the number of college places is equal to the number of students desiring to attend and these places are geographically well-distributed to meet student demand. Another possible explanation may be that large, highly populated areas provide just enough two-year and four-year public and private colleges to balance student demand. This seems to be the case in states like New York and California which have the most extensive public college systems. Minority students in these states attend two-year colleges in large numbers (see Appendix Table VII).

Location clearly affects the cost of attending college. It is less expensive for a student to attend college close to home because it can offset the expense of living on campus. More than 35 percent of the freshman class of 1978-79 lived at home, and close to 50 percent went to college within 50 miles of their residences.[77] This suggests that there is an extensive network

of assorted institutions of higher education within close proximity to the students' nomes to meet their attendance needs. As a factor in college attendance perhaps this appears to support the importance of location contrary to the findings of Jackson and others. It may be that other factors, such as family background and motivation, determine whether a student will or will not attend college, and once this initial decision is made location is then considered. Further research is necessary, however, to determine whether location of selective schools plays an important role in minority students' decision to apply, as well as the more subtle effect of extensive two-year college systems on minority students' college aspiration.

Summary: This section has reviewed research aimed at explaining differential college attendance rates, with special attention to the processes contributing to the race and class differences described in the previous section. The research suggests that the process is very complicated, with ability, achievement, and aspirations as important intervening variables, shaped -- though not completely -- by family background and in turn affecting decisions about applications and attendance. The findings suggest little direct discrimination in admissions by race or class. The costs of college may, however, be an important deterrent to low income students.

More important, especially for minorities, are test scores, which contribute (in the statistical sense) to the differential enrollment rates of whites and blacks. That blacks have lower test scores does not seem to us to justify or make right their

lower attendance at college generally and at selective institutions particularly. Indeed, low test scores are best seen as part of the problem, requiring remedial efforts at all levels of education. We see no reason to believe that native intelligence is not distributed randomly among racial groups. In the absence of evidence to the contrary it seems to us sound policy to assume that low test scores are a legacy of historic discrimination and present disadvantage. Until these can be truly remedied, it may be well to reconsider the use of tests in selective admissions.

Motivations and aspirations, also powerful predictors of college application and enrollment, "explain" much of the difference between groups in enrollment rates. We believe that they too should be considered part of the problem rather than a justification of the status quo. This problem is even more complicated than that of test scores, since it is impossible to make a decision simply to eliminate consideration of motivation. The roots of aspirations in family life and earlier schooling must be explored.

More easily subject to policy manipulation are the effects of college cost and location. There research suggests that both have modest effects on enrollment rates; they too are taken up in the section on policies.

D. Public Subsidies to Higher Education

The two previous sections have focussed on enrollment rates, particularly enrollment rate differencials by race and class. We have raised questions of equity about the distribution of higher education, arguing that observed race and class differences cannot be justified by the intervening variables about which we have information. In this section, we take a different approach to the question of equity in higher education, looking at the distribution of public subsidies to higher education.

The higher education system in the United States is an interesting hybrid of public and private. It generates both private and social benefits, as described in Section A, and it is paid for from both public and private funds, as noted in Section C. How to examine the question of distribution is complicated by this mixed nature. For example, should equity be judged along criteria similar to those used in judging public elementary education, perhaps using the standard of Brown v. Board of Education that when the state provides education, it must be provided equally to all? Or should the criteria be analogous to those used in judging the equity of distribution of basic necessities, like food? For these goods many would argue that equity requires minimum provision to everyone but allows substantial inequalities above the minimum. Or should the distribution of

higher education be approached analogously to that of many other consumer goods, for which ability to pay does not seem an unreasonable distributive standard?

These questions are taken up in later sections. In this section we deal only with that part of the cost of higher education that can unambiguously be called public -- the part financed by federal, state and local taxes. As noted earlier, public funds pay about half of the total money costs and about one-third of the total economic costs (including foregone earnings) of higher education in the United States. Whether this allocation of costs reflects the relative magnitude of public and private benefits, or public perceptions of these benefits, will not be dealt with here. We simply look at the distribution of public subsidies at the current aggregate level.

Even for this more limited task, however, there are several possible ways of thinking about the equity of distributions. Analogies to other public subsidies can illustrate the alternatives. Elementary education provides a good example to begin with. A common view is that school districts ought to provide substantially equal resources to children within the district, with the exception that handicapped or disadvantaged children should perhaps receive somewhat more. Intuitions about disparities between districts and especially between states are less clear. Many argue that people entitled to get what they pay for, and thus districts and states which raise more money legitimately

provide more resources for education. Thus three criteria are used when people think about elementary education: equal shares; shares based on need; and shares based on contribution.

Another provocative example is public spending for scientific research (or national security or public safety). The justification for spending public money on scientific research is that it will in the long run benefit everyone. Because individuals cannot generally purchase just the amount of research they need in the market, it is efficient to fund it collectively. The long run benefits are assumed to accrue to everyone. The short run benefits, however, the actual public subsidies, go only to scientists, and relatively few scientists at that. Equity is considered to be satisfied if the subsidies go to the best scientists, who will most efficiently produce the best knowledge. Geographical and racial distributions are sometimes considered, but the basic standard is merit. No one argues that all citizens ought to receive equal shares of the funds spent on scientific research.

With these analogies in mind, we examine the data on public expenditures. Public subsidies to higher education are of two basic types: those which lower the price of education in public institutions and thus subsidize all those who attend the institutions; and those which go to individual students in the form of scholarships, grants and subsidized loans. Subsidies to institutions come almost entirely from state and local governments. The

federal government is now the primary source of public student assistance, although state and local governments make some contributions. These subsidies are clearly not distributed in equal shares, even among young people. None go to those who do not attend college. Almost none of the substantial state subsidies go to students in private colleges. The amount of subsidy to students in public institutions varies with the type of institution: In California in 1965, for example, the state subsidy per junior college student was $720, per state college student $1,400, and per University of California student, $1,700. In addition, subsidies vary tremendously from state to state, from $3.171, in 1977 per student in Alaska's state institutions to $1,024 per student in Oklahoma.[78] Subsidies can thus range from $0 for non-college or private college students to $5,271 for a University of Alaska student with a maximum federal BEOG grant.

Need: One estimate of distribution by need comes from Jackson's analysis of the National Longitudinal Study, noted in the previous section (Figure 6 previous section). Jackson used the difference between resident and nonresident tuition as his measure of subsidy, and found average subsidies to students to be about equal across SES levels. Figure 6 also showed the distribution of scholarships and grants, many of which were federal or state funded. These decrease with increased SES. Thus Jackson's

analysis suggests that the distribution of subsidies among students is somewhat responsive to need: proportional for tuition subsidies and progressive for grants.

A second, somewhat different, estimate was made by the Carnegie Commission, using aggregate data for 1971, and is shown in Table 15. The table shows that the distribution of institutional subsidies across family income levels was roughly similar to the distribution of familie of college attenders. Like Jackson's estimates of tuition subsidies this suggests that subsidies are distributed proportionately rather than according to need. Table 15 also shows, however, the distribution of families of the college-age population, which is quite different from the distributions of either subsidies or college attenders. Families with incomes under $5,000 included 22.1 percent of the college-age population but received only 13.5 percent of institutional subsidies. At the other end, families with incomes over $15,000 included only 16.4 percent of the college-age population but received 28.0 percent of the subsidies. From this point of view, subsidies <u>increase</u> with increasing income, the opposite of distribution by need.

Both Jackson and the Carnegie Commission used data which predate the very large federal program of Basic Educational Opportunity Grants. The Office of Education, however, reports

Table 15

Distribution of Educational Subsidies,
College Attenders and College-Age Population
by Income Class, 1971

Family Income Group	Institutional Subsidies	Families of College Attenders	Families of College-Age Population
Under $3000	4.8%	4.8%	8.4%
$3000-5000	8.7	9.2	13.7
$5000-7500	13.3	14.4	20.2
$7500-10,000	17.7	17.6	18.5
$10,000-15,000	27.5	26.7	22.8
Over $15,000	28.0	27.2	16.4
	100.0%	100.0%	100.0%

Source: Carnegie Commission on Higher Education, Higher Education: Who Pays? Who Benefits? Who Should Pay? NY: McGraw Hill, 1973. Tables 13 and 14, pp. 44 and 45.

data on their distribution of those grants in 1979, shown in Table 16. Students from families with incomes under $5,300, who represented about 10.4 percent of the total college-age population (but only about 4 percent of attendees) comprised 14.4 percent of all students receiving Basic Educational Opportunity Grants and received 18.5 percent of the funds. Students in $5,000-15,000 range received an even larger proportionate share of funds. While families with incomes in that range included 29.0 percent of the college-aged population and 22.9 percent of attendees in 1978, they represented 50.6 percent of the total recipients and received 58.2 percent of the funds. Those students with family incomes between $15,000 and $20,000 (14.1 percent of the college-age population) came out about even with 13.9 percent of the aid, while those 36.1 percent of the students at the upper-income levels ended up with considerably less. These figures seem to indicate that BEOG's are distributed very progressively, even if the college age population (rather than attendees) is used as the distributional standard.

Tax Payments. The Carnegie Commission also estimated the distribution of the tax burden for higher education across income levels. Their estimates are very rough, but provide the only national data available. The distribution of the tax burden is compared with the distribution of subsidies in Table 17. The table suggests that in the aggregate the poor benefit proportionately more than they pay; the rich benefit proportionately less.

Table 16

Distribution of Basic Educational Opportunity Grants by Parental Income, 1979-80

Income	Families of College-age Population	Families of College Attendees, 1978	BEOG Recipients 1979-80	BEOG Total Funds 1979-80	Average BEOG Award
0-4999	10.4%	4.2%			
0-5300			14.4%	18.5%	$1185
5000-9999	14.2	9.5			
5301-9900			22.7	28.8	1172
10,000-14,999	14.8	13.4			
9901-15,900			27.9	29.4	973
15,000-19,999	14.1	13.5			
15901-19900			17.8	13.9	722
20,000 +	36.1	49.2			
19,901-99999			17.2	9.4	506
Not reporting	10.4	10.2	----	----	----
	100.0%	100.0%	100.0%	100.0%	

* Data are not quite comparable, since slightly different income categories were used by OE and CPS. The difference in dates should underestimate the degree of progressivity in the BEOG's, since lower proportions of students would have been in lower income categories in 1979.

Sources: Current Population Reports, P-20 #346; OE, Middle Income Students Assistance Act, H-R 10854, P-215.

Hanson and Weisbrod's analysis of the California system, however, comes to a less benign conclusion.[79] Students eligible to attend the University of California were unequally distributed across family incomes (Table 18A), with students from high income families disproportionately represented as eligible compared with those students from families having low incomes. Hansen and Weisbrod argue that more advantaged students are therefore eligible to receive larger state subsidies since they tend to enroll in four-year institutions, whereas their poorer counterparts are more likely to attend two-year colleges or not to enroll at all. Moreover, since students attending the university, state, or junior college systems receive higher-education subsidies greater than the average state and local taxes paid out by their families (see Table 18B), they are in effect being subsidized by those families either without children or with children who do not attend a post-secondary institution. Since a smaller percentage of low income students attend college, their families must pay taxes which disproportionately support wealthier students without receiving the benefit of any subsidies in return.

Hansen and Weisbrod raise the serious question of subsidizing one group's specialized training -- via college -- at the expense of those who do not attend. Certainly those families without children and those with children who do not enroll in post-secondary institutions are not directly benefitting from these transfers. One might argue that all of society indirectly benefits from those who go to college. This argument must be

Table 17

Distribution of Tax Burdens for Higher Education and Educational Subsidies, by Income Class, 1971

Family Income Group	Institutional Subsidies	Tax Burden
Under $3000	4.8%	2.1%
$3000-5000	8.7	5.6
$5000-7500	13.3	10.4
$7500-10,000	17.7	14.0
$10,000-15,000	27.5	26.5
Over $15,000	28.0	41.4
	100.0%	100.0%

Source: Same as Table 15

Table 18

Table 18A - Distribution of High School Graduates by Eligibility for Public Higher Education in California, by Type of Education and Family Income (In Percents)

Family Income	Percentage Distribution of High School Graduates by Eligibility for	
	University of California	University of California and State Colleges
	(1)	(2)
$0-3,999	10.7	28.0
$4,000-5,999	11.5	26.3
$6,000-7,999	11.9	30.5
$8,000-9,999	16.2	33.2
$10,000-12,499	19.4	37.1
$12,500-14,999	22.5	39.8
$15,000-17,499	27.9	45.4
$17,500-19,999	29.5	45.1
$20,000-24,999	33.3	46.1
$25,000+	40.1	54.3
Not reported	13.3	28.0
All	19.6	36.3

Note: This table was based on data from CCHE, Financial Assistance Programs, 67-13 (Second Revision), October 31, 1967. Table 1-2, pp. 1-9, Table 1-3, pp. 1-10, and Appendix Table B-3.

Table 18B. Average Family Incomes, Average Higher Education Subsidies Received, and Average State and Local Taxes Paid by Families, by Type of Institution Children Attend in California, 1964

	All Families	Families without Children in California Public Higher Education	Families with Children in California Public Higher Education			
			Total	JC	SC	UC
	(1)	(2)	(3)	(4)	(5)	(6)
1. Average family income	8,000	7,900	9,560	8,800	10,000	12,000
2. Average higher education subsidy per year	--	0	880	720	1,400	1,700
3. Average total state and local taxes paid[c]	620	650	740	680	770	910
4. Net transfer (Line 2-Line 3)	--	-650	+140	+40	+630	+790

c Total state and local tax rates were applied to the median incomes for families in each column

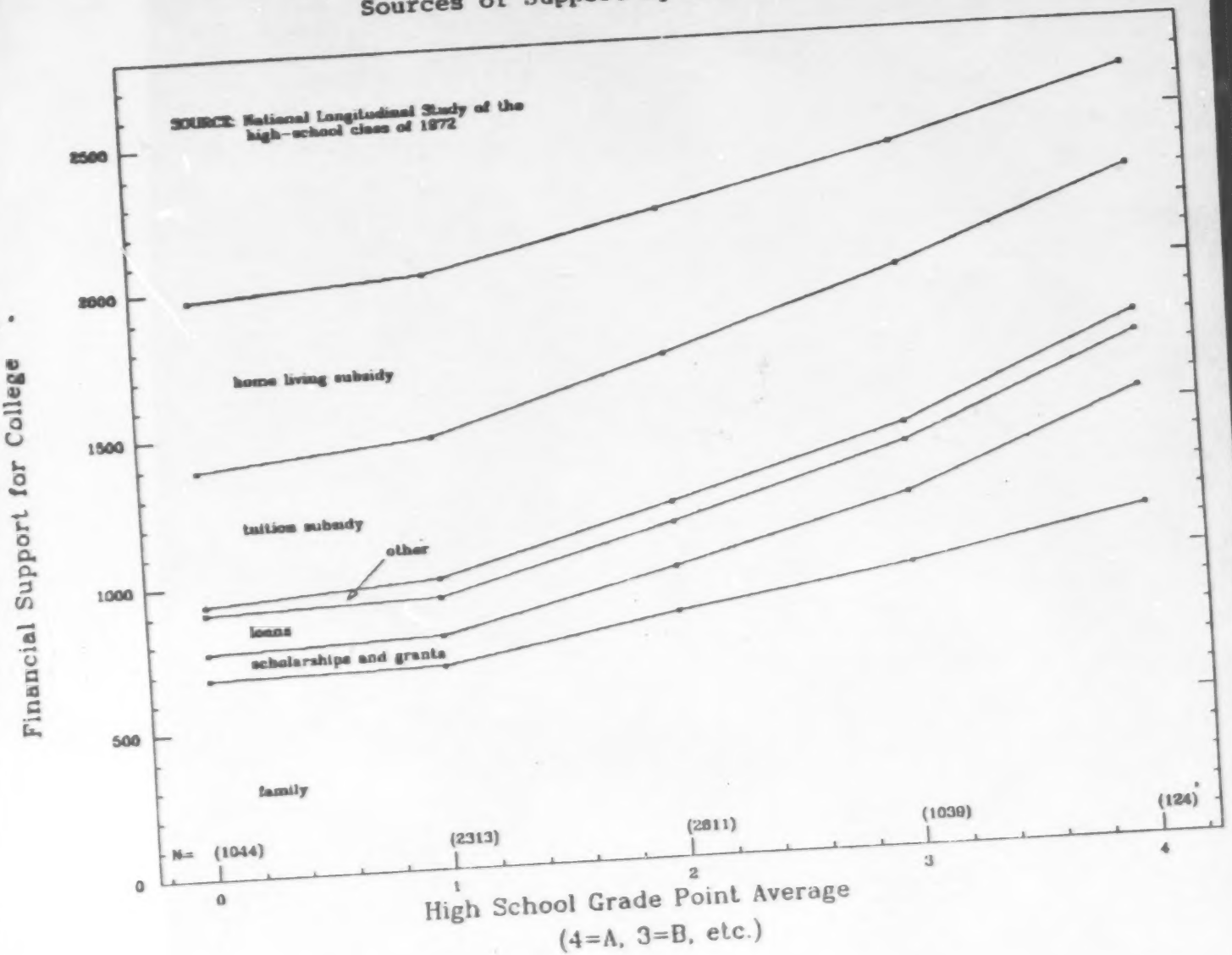
Source: W. Hansen and L. Weissbrod. "The distriutoin of Costs and Direct Benefits of Public Higher Education: The Case of California." Journal of Human Resources, Vol. IV, Spring 196

balanced, however, against the fact that access to college is not equitably distributed and that family income plays a dominant role in the type of college a student attends.

Hanson and Weisbrod's analysis was limited to only one state, California, which has the most extensive public education network in the United States. Analysis of tax and benefit incidence are not available for other states. It is clear, however, that average spending per student varies tremendously from state to state, ranging from $1,023 to $3,471 (Appendix Table IX); the availability of loan assistance also varies greatly from state to state. These variations reflect to some extent states' willingness to tax themselves for higher education, and to that extent represent a get-what-you-pay-for distribution of subsidies. The variations also, of course, reflect differences in states' tax bases and to that extent violate criteria of distribution by need.

Achievement: Jackson analyzed the allocation of college costs by the high school grades of NLS students enrolled in college; his findings are presented in Figure 7.[80] They show that tuition subsidies from state and local governments are fairly evenly distributed among students with different high school records. They also show that the distribution of scholarships and grants favors students with high grades. Many scholarships and grants are, of course, given by colleges, and may be more responsive to academic merit than state and federal grants. On the other hand, at least some private scholarships are for athletes and other special categories and would be expected not

Sources of Support by Grades



to vary, or to vary inversely, with test scores. It may be safe to conclude that public grants and scholarships, like total grants and scholarships, go disproportionately to students with higher test scores.

All federal BEOG and SEOG grants, and many state scholarships, are distributed strictly on the basis of need, with no consideration of academic achievement or potential. A strict application of a need criterion would be expected to produce an inverse relationship between scholarships and grades, since low income students tend to have somehat lower grades. That this does not occur may be partly explained by the fact that BEOG and SEOG grant levels depend partly on the cost of the colleges students attend. BEOGs are set at half the cost of college attendance, up to the $1,800 current maximum; SEOGs are distributed by the colleges and go disproportionately to students in private and expensive public institutions. Because students with better grades tend to go to more expensive colleges -- private colleges and public university systems rather than community colleges -- they end up with a larger share of public scholarships and grants.

Because students who do not go to college receive no public higher education subsides, Jackson's data underestimate the extent of distribution by academic achievement among the total population of young people. The very existence of higher education subsidies implies a judgment about merit: that young people who go to college are more deserving than those who do not. If they were included in the base on which expenditures

were allocated, the distribution would be even more dramatically tilted toward young people with better grades.

Summary: The distribution of public subsidies for higher education seems to be more reflective of considerations of merit than of the other criteria we have looked at. Though some subsidies are based on need and go disproportionately to low income students, the subsidy system as a whole gives about the same shares to lower, middle and upper class students and thus favors the better off among the total population of young people. This system does seem to be mildly progressive in terms of contributions, however, with the better off paying somewhat more in taxes than they receive in subsidies.

PART I: FOOTNOTES

1) Condition of Education. National Center for Education Statistics, 1979, pp. 90 and 108; and Current Population Reports, P-20, No. 333, 1979, Table 1.

2) Condition of Education, 1979, p. 128

3) Federal Security Agency. Office of Education, November 15, 1948, Circular No. 248.

4) Condition of Education, 1979, p. 108.

5) Federal Security Agency. Table F.

6) Digest of Education Statistics, 1979, p. 89.

7) Current Population Reports, P-20, No. 333, 1979.

8) Current Population Reports, P-20, No. 190, 1969.

9) Federal Security Agency. Table F.

10) Condition of Education, 1979, p. 110.

11) Chronicle of Higher Education. "Characteristics and Attitudes of 1978-1979 College Freshmen," January 22, 1979.

12) Gregory A. Jackson. Financial Aid to Students and the Demand for Postsecondary Education. Unpublished Doctoral Dissertation, Harvard Graduate School of Education, 1977.

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15) Christopher Jencks, et al., Who Gets Ahead? The Determinants of Economic Success in America. (New York: Basic Books, 1979), p. 187.

16) Lester Thurow, Generating Inequality: Mechanisms of Distribution in the U.S. Economy. (New York: Basic Books, 1975).

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18) Jencks, et al., p. 186.

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20) C.R. Pace. The Demise of Diversity. (Berkeley, Calif.: Carnegie Commission on Higher Education, 1974), pp. 15, 52 and 53.

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26) Arleen Leibowitz. "Education and the Allocation of Women's Time" in F. Thomas Juster (Ed.) Education, Income and Human Behavior. (Berkeley: Carnegie Commission on Higher Education, 1975), pp. 189-193.

27) Leibowitz, pp. 187-194.

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29) Withey, 1971, p. 85.

30) Bowen, 1978, p. 98.

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33) Bowen, 1978, pp. 113-114.

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41) Condition of Education, 1979, p. 182.

42) Condition of Education, 1979, p. 185.

43) Condition of Education, 1979, p. 183 and Population Characteristics, Series P-20, No. 333, "School Enrollment--Social and Economic Characteristics of Students." The figure for high school graduates in 1976-77 was 3,154,000 and the freshman enrollment in October 1977 was approximately 1,300,000 or 40 percent of the total number of high school graduates.

44) Current Population Reports, Series P-20, No. 314, "Educational Attainment in the United States: March 1977 and 1976."

45) Current Population Reports, Series P-20, No. 333.

46) Condition of Education, 1979, p. 91.

47) Gregory A. Jackson. Financial Aid to Students and the Demand for Postsecondary Education. Unpublished Doctoral Dissertation, Harvard Graduate School of Education, 1977. Gregory A. Jackson, "Financial Aid and Student Enrollment." Journal of Higher Education, Vol. 49, No. 6, 1978.

48) The variables used in the final analyses did not include sex. Jackson explains: "I included sex in all exploratory analyses, both as a simple predictor and as a stratifying variable. It seldom had any effect; the small effects it did have vanished once I controlled aspiration variables."

49) 16.9 percent of the variance in attendance is explained by place and background.

50) 55.5 percent of the variance in plans is explained by knowing the other variables.

51) NLS Study, p. 182.

52) National Longitudinal Study of the High School Class of 1972. "Tabular Summary of First Followup Questionnaire Data." (Washington, D.C.: National Center for Education Statistics, 1976), Table 339.

53) National Longitudinal Study of High School Class of 1972, 1976. Table 340.

54) Consortium on Financing Higher Education. Enrolling the Class of 1979: Second Annual Report on the Student Market at Twenty-Three Institutions. (Hanover, New Hampshire: October, 1976).

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56) See Table 9 and Appendix Table V.

57) See Table 9 and Appendix Table V.

58) Alexander Astin. "The American Freshman: National Norms for Fall, 1978" cited in the Chronicle of Higher Education, January 22, 1979, pp. 14-15.

59) Jackson. Unpublished Doctoral Dissertation, p. 6.1.

60) Jackson. Journal of Higher Education, p. 561.

61) Selective Admissions in Higher Education, p. 77.

62) National Longitudinal Study of the High School Class of 1972, 1976. Question No. 24.

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72) Jackson, Gregory A. "How Students Pay for College: Temporal and Individual Variation." Higher Education, Vol. 9, No. 5, September 1980.

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74) Gregory Jackson and George Weathersby, "Individual Demand for Higher Education." Journal of Higher Education, November/December 1975.

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78) See Appendix Table IX.

79) W. Lee Hansen and Burton A. Weisbrod. "The Distribution of Costs and Direct Benefits of Public Higher Education: The Case of California. Journal of Human Resources, Vol. IV, Spring 1969.

80) Jackson, "How Students Pay for College."

Part II: Principles

Having described the present state of affairs in higher education regarding admissions and financing, we propose to set out some policy recommendations for change. In order to do that, however, we need to devote some attention to the articulation and defense of general principles to guide our reflections. This part of the report is therefore an excursion into moral philosophy.

Since our concern is with educational equity, we shall begin by distinguishing the most prominent senses in which the term "equity" is employed, both in law and in philosophy. This exercise will help as much to clear away issues that shall not concern us as to define our special focus. We shall then describe and explore two ways in which questions of equity characteristically arise in educational settings. The first concerns acts of invidious discrimination; the second concerns undeserved disadvantages, both natural and social. In each case compensatory action of some sort is called for, and it is in the fashioning of remedies or forms of redress that claims of educational equity are asserted, taking the form of appeals to general principles to justify one sort or another of compensation. Much of our discussion will consist of subjecting such principles to moral scrutiny. Once we have arrived at a satisfactory interpretation of these principles, we shall be in position to draw out their implications for post-secondary educational institutions.

Before we begin, however, we think it is important to say a

word about the necessity of philosophical reflection in the formation of policy.

A. The Place of Philosophy

It is too easy, we believe, for policymakers to underestimate the complexity of statements of principle. We shall try to illustrate this complexity by means of what may appear at first glance to be a frivolous example, that of a referee in a chess tournament trying to decide if a game has been forfeited. We shall then sketch the analogous situation of an educational policymaker debating about a preferential admissions program.

Ronald Dworkin offers a brilliant exposition of the difficulty faced by a referee in a chess tournament when one of the players smiles continually at his opponent in such a way as to unnerve him.[1] The task of the referee is to apply the accepted rules of the game, but on the question of psychological intimidation the only rule that seems relevant, Dworkin supposes, is the rule that provides that the referee shall declare a game forfeit if one player "unreasonably" annoys the other in the course of play. The rule does not specify what counts as an unreasonable annoyance. How then is the referee to decide whether it applies to the present kind of case? The first point to observe, Dworkin insists, is that the referee is not free to decide the case in any way that he pleases. The players and other interested parties have legitimate expectations regarding referee decisions even when the rules offer no specific guidance. These expectations are based principally on the character of the game.

It is, for example, a game and not an artistic performance, and it is an intellectual game, not a game of chance. So the referee must ask himself whether psychological intimidation, or the ability to resist it, is an intellectual quality, and that question, Dworkin observes, requires an examination of the concept of intellect itself.

Thus the conscientious referee is ineluctably moved by the difficult case into philosophical inquiry. Of course the process of reasoning among actual referees is never so explicit or careful, but we might say that the experienced referee is one who has come to some tacit determination of these issues in the course of his activity.

The position of the policymaker is analogous in important respects. On the view that policy formation is guided by or is designed to further distinct social principles, the policymaker will have to interpret those principles: What, concretely, do they require? How do they apply in a particular type of situation? And this will necessitate careful philosophical analysis. For example, suppose we ask whether a scheme of preferential admissions in post-secondary institutions is required by the principle of equal opportunity. A host of questions arise, first, about the nature and purpose of post-secondary education (analogous to the referee's questions about the character of the game of chess). Is a liberal arts curriculum, for example, designed primarily to initiate students into a cultural tradition, to provide students with an enriched environment conducive to self-exploration and the development of moral and aesthetic

sensibilities, or is it designed primarily to test the differential possession of certain general skills which become the basis for sorting individuals in the job queue? Needless to say, in assessing these matters, the policymaker will have to compare professed ideals against social realities.

Even when such matters are settled, there remain more fundamental questions about equal opportunity itself. Does equality of opportunity require (as Plato thought) a distribution of individuals among educational institutions and occupations such as to form an exact correspondence of personal qualifications with available places, without conflict or dissatisfaction? Does it require that any individual have as good a chance as any other of obtaining the position he or she desires, without regard to the social usefulness of the work? Or does equality of opportunity obtain only when an individual is free to engage in a vocation he or she is fit for, where fitness may be limited by natural disadvantages, such as impaired auditory ability or low intelligence, though not by race or sex? Finally, does equality of opportunity require organized efforts to raise students' aspirations when they have been unduly suppressed by the effects of social class?

Answering these questions requires a careful working out of different conceptions of equality and relating each to the demands of equity. Conceptions of equality, in turn, cannot be intelligibly explicated except in the context of general moral theory. Thus the attempt to arrive at a reasoned position on the legitimacy and even the design of a preferential admissions

program can take the policymaker into very deep water indeed.

We have attempted to pursue some of these questions in this part of our report, but in order to render such an inquiry appropriate to the features of contemporary post-secondary educational institutions (as they now are and as we expect them to remain in the near future), we have imposed on ourselves an important methodological constraint. Moral issues have been framed in terms consonant with the United States Constitution, especially the Equal Protection Clause of the Fourteenth Amendment, and with the interpretive Supreme Court decisions and derivative Congressional legislation of recent decades. In doing this, we may appear to have struck a compromise between the philosopher's conception of his task and the policymaker's conception of her. The moral philosopher, at her best, is responsive to standards of argument and analysis set by a critical literature spanning thousands of years; the policymaker is responsive to the "political realities" of a particular time and place, including limited resources and a diversity of powerful interests.

Our conception of our task, however, is different. In constraining ourselves to constitutional principles, we have sought the most compelling grounds for citizens' legitimate expectations regarding the future of educational institutions. The Constitution is our collective compact, giving voice to the moral aspirations that provide the basis for demands on our energies and resources. From the Constitution, courts and legislatures derive their powers, their standards of decisionmaking, and much

of their moral authority. It follows that we cannot remodel post-secondary education in any way that we may please. On the other hand, to be constrained by principles which have a history and justification of their own does not mean that we have abandoned philosophical inquiry. Our program is philosophical in just the sense in which John Dewey often used that term. It is a form of social criticism -- examining and clarifying our present principled commitments and extending them in accord with the most progressive forces in our society.

B. Meanings of Equity

In the broadest sense, equity is a matter of fairness in decisionmaking, especially regarding the recognition of people's legal and moral rights. We shall attempt to elucidate what the requirement of fairness amounts to concretely by distinguishing three senses in which the term equity is commonly used. Our illustrations are not taken from educational settings, but the relevance of the distinctions we draw will be made apparent in the subsequent discussion.

First, there is the matter of inconsistent applications of established rules. For example, during the recent Vietnam War an eligible draftee's chances of being classified as a conscientious objector depended to a large extent on the region of the country he came from.[2] The criteria of classification were the same for each local draft board, and we may even assume, what is unlikely, that each board was consistent in its own decisions. Nonetheless, when comparisons were made between boards, one could see

that individuals were treated inequitably -- essentially similar cases (as defined by the rules) were treated differently.

Equity is invoked in a second sense when a case falls under a rule (that is, the case is an instance of the fact-situation described in the rule) but application of the rule to the case would be unjust because of circumstances not taken into account by the rule. This situation is nicely illustrated by the case of Tedla v. Ellman.[3] Tedla and her brother were walking late in the day with a lighted lantern on the right-hand side of a roadway lacking footpaths, darkness having set in. They were struck by a passing automobile operated by the defendant. A jury found that the accident was due solely to the negligence of the operator. In the appeal this finding was not challenged, but the defendant maintained that the plaintiffs were guilty of contributory negligence as a matter of law, because they had been walking on the wrong side of the road. According to the traffic laws, pedestrians walking on the paved portion of a road must keep to the left of the center line, permitting vehicles going in either direction to pass on their right. The plaintiffs clearly had not observed the statute. However, the testimony of a policeman indicated that the side of the road on which the plaintiffs had been walking had very few cars passing on it, whereas the other side had heavy night traffic. The situation, then, in Judge Lehman's opinion, was that of the plaintiffs violating a statute

designed for the safety of pedestrians, where observance of it would have exposed them to serious danger. He rejected the appeal.

This kind of situation is in part what Aristotle may have had in mind when he called equity "a correction of law where it is defective owing to its generality."[4] The refusal to make a rigid or literal application of a rule is often honored as "individualized justice," though strictly this term is misleading. The novel fact-situation does not embody any unique features; it too is subject to a general description, which may then be applied to other similar cases. Rather, one description or classification of fact-situations is replaced by another that is considered more reasonable, where reasonableness is judged either by an appeal to the purpose of the rule in question, as in Tedla, or by a direct appeal to principles of justice.

Since this kind of situation can arise in a variety of different ways, another illustration may be helpful. In the complicated wage scales of modern factories, it may happen that two jobs of very different description are remunerated differently, even though they demand the same level of skill and prior training. A holder of the lower-paid position could therefore make a claim of inequitable treatment on the ground that the classificatory scheme does not satisfy the principles appropriate to determining what workers deserve, relative to one another. Thus the claim does not concern the consistency with which the

initial classification is applied but the reasonableness of the classification itself. The lower-paid worker is urging the introduction of a new and more just classificatory scheme.

Third, and finally, we should note the situation where agreement exists on relevant rules or principles, but the rules or principles call for contradictory actions. Typical examples also concern the distribution of wages. Suppose, for instance, that two workers, one male and one female, are performing the same job. Our first thought is that they should receive the same remuneration. In a free-market economy with private ownership of firms, this view will be based in part on the belief that workers' wages should be determined by their marginal productivity, which rests ultimately on market forces. Let us add, however, that the woman is the head of a household with three children and without other financial resources, and the man is a bachelor with a large inheritance. We may now think the woman ought to receive more pay in accordance with her greater need and yet still be unwilling to give up the free-market formula of "equal pay for equal work." In the face of this sort of dilemma, brought on by a conflict of principles, equity consists in effecting a compromise.[5] Rejecting neither principle, we attempt to find a way of satisfying both -- and hence, since they conflict, of not entirely satisfying either one. In the example presented, we might devise a governmental scheme of children's allowances, thus providing "supplemental income" to households below a certain level, without appearing to question the remuneration formula.

It is important to distinguish this type of case from one in which the resolution of a conflict of principles is possible by invoking a higher, more comprehensive principle. The higher principle might provide a basis for ascribing different weights to the conflicting standards and thus for giving priority to one over the other, or it might assign the principles to diffent spheres of application and remove the conflict altogether. When courts are faced with opposing claims based on conflicting rules or principles, their task is to seek resolution at a higher level rather than simply to effect a compromise between the parties. So much is required, at any rate, by the notion of adjudication, which involves a principled determination of litigants' rights and the remedies to which they are entitled, rather than the kind of ad hoc (even if effective) settling of disputes characteristic of mediation. Equity in the third sense then, unlike the other two senses, has no apparent application to judicial decision-making; however, we shall discuss presently how the flexibility of ad hoc dispute settlement can itself be a requirement of principle.

Before we conclude our discussion of meanings of equity, we need to introduce one further sense of the term, a special sense connected to the curious Anglo-American institutions known as courts of equity (the principal one being the court of Chancery) which emerged as distinct entities in England beginning in the 14th century and were finally combined with the common law courts in 1873.[6]

The initial impulse for the development of courts of equity seems to have been as a corrective to the established common law courts. A rigid schedule of permitted causes of action and strict adherence to precedents in the common law courts resulted in numerous suits (or acknowledged harms) for which there was no adequate legal remedy. The courts of equity attempted to make good this deficiency, but their method for doing so was necessarily controversial. Since they could not base their decisions on established law, cases were settled by appeal to principles of "natural justice," or at least so much of natural justice as was considered judicially enforceable. Some commentators, putting the point differently, say that the standard of "adequacy of remedy" was the chancellor's conscience.

In time, however, the courts of equity became almost as technical as the common law courts in following precedents and adhering to fixed principles. Furthermore, equity to some extent complemented the common law rather than superceding it; by protecting different rights altogether, it carved out a jurisdiction of its own. Nonetheless, the moral sense that had animated the original courts was not lost. The chancellor's conscience took on the public form of an enduring body of principles or maxims, refined and elaborated by successive judges, for guiding decisions in specific cases. These principles also continued to reflect equity's central preoccupation, that of devising remedies for harms not otherwise adequately provided for by law. When

courts of equity as distinct institutions finally disappeared, these "principles of equity" were assimilated into the law as a whole.[7]

The main function of principles of equity, then, is to guide the exercise of judicial discretion on matters of remedial justice, where there is no explicit or no adequate relief provided as a matter of law. In the discussion that follows, our concern will be with remedial justice (or equity) in that sense. We shall examine a variety of principles of equity in relation to educational policy. Since we shall be attempting to justify certain forms of redress for acknowledged wrongs, our first task will be to identify the wrongs that require remedying. Here our standard will be the Equal Protection Clause of the Fourteenth Amendment. Even such an apparently narrow focus, however, would raise more issues than we could possibly hope to analyze. So we shall narrow our concern further to two main issues: invidious discrimination and equal educational opportunity.

The Equal Protection Clause has had its most apparent application in cases of discrimination, and even though the Fourteenth Amendment explicitly provides Congress with the power of enforcement (unlike the articles of the Bill of Rights) the task of devising remedies has fallen principally to the Supreme Court. (We shall have to pay some attention, however, to the Civil Rights Act of 1964.) Historically the power of the Court to enforce constitutional provisions has been limited to issuing

injunctions to halt ongoing violations and invalidating discriminatory legislation. In connection with educational institutions, however, the court has adopted a more active stance. Since Brown v. Board of Education,[8] school districts found to have engaged in intentional discrimination have been under the affirmative duty to correct the consequences of their discriminatory acts. It is not obvious of course what "correcting the consequences" requires exactly, and the Court has had to struggle ever since Brown with the issue of appropriate remedies. Here it has relied on four principles of equity, which we shall discuss in detail in section C.

The issue of equal educational opportunity has not come before the Supreme Court in so direct and uncompromising a form as the issue of discrimination. There is, however, a body of emergent law on equal opportunity contained in several lower court decisions, which also rely on the Equal Protection Clause. We shall begin our discussion in section D with a review of some of these cases, but our initial effort will be to criticize the courts for conflating matters that should be kept distinct. To the extent that the judicial discussion of equal educational opportunity has been motivated by a concern with discriminatory effects of certain school programs, we have no quarrel. But if the issue of discrimination is put to one side, it becomes less clear what the basis of judicial intervention has been. The reason for the uncertainty here is that the conditions for which remedies are being found (for example, having a congenital learning disability or being born of Spanish-speaking parents) are not

wrongs caused by some person or group. They are situations, rather, in which certain individuals find themselves disadvantaged, either by natural or by social factors, in the competition for educational distinction. The question raised (and not clearly addressed) by the judicial decisions, then, is whether the actual distribution of advantages and disadvantages is arbitrary from a moral point of view and ought to be rectified, to the extent possible, as a matter of social policy. This is an important and, needless to say, complex question of remedial justice. As there is little direct treatment of this question in judicial or for that matter legislative sources, we shall turn to some recent philosophical literature for enlightenment in formulating relevant principles of equity.

C. Remedying Discrimination

As part of one of the "Civil War Amendments," the Equal Protection Clause is tied by its history to the issue of racial discrimination. Early on the Supreme Court interpreted the clause to require equity between persons of different race in the administration of laws (the first common meaning of equity described in the previous section). Thus a conviction under a criminal statute that was reasonable in its purpose and racially-neutral in appearance could be overturned, as a violation of equal protection, if the statute was not administered evenhandedly between persons in essentially similar circumstances.[9]

Evenhanded administration, however, was too narrow a focus for a Constitutional provision prohibiting racial classifications

in the laws themselves. So the court gradually developed criteria for assessing the reasonableness of legislative classifications (equity in the second common meaning). In a formal sense, the court would consider a classification unreasonable if the class of people actually identified by a statute was either larger than or smaller than the class relevant for carrying out the purpose of the statute. These conditions became known as over-inclusiveness and under-inclusiveness.[10] For example, in the case of Korematsu v. U.S.,[11] the Court had to consider the validity of a military order during World War II confining American citizens of Japanese ancestry to internment camps. Now this order could be considered both over-inclusive and under-inclusive at the same time. The purpose of the order was to reduce the danger of sabotage by disloyal Americans, but the class of people picked out by the order contained mostly loyal Americans of Japanese ancestry (over-inclusiveness) and failed to contain disloyal Americans of German ancestry (under-inclusiveness). It must be noted, however, that in practice the Court was usually tolerant of a substantial lack of fit between purpose and classification when applying its criteria. If the Court could think of some (hypothetical) purpose served by a statute as written, whether or not it conformed to the actual intent of the legislating body, it would regard the statute as satisfying the test.

In Korematsu, a majority of the Court was prepared to uphold the military order. Since the classification at issue was racial, however, the usual deference to lawmaking bodies could

not be taken as a matter of course. Instead Justice Black, writing for the majority, began by observing that legal classifications curtailing the civil rights of a racial group are "immediately suspect."

> "That is not to say that all such restrictions are unconstitutional. It is to say that courts must subject them to the most rigid scrutiny. Pressing public necessity may sometimes justify the existence of such restrictions; racial antagonism never can."[12]

This landmark opinion thus established two points which are crucial for understanding subsequent equal protection cases. First, some legislative classifications implicate such basic rights of citizens that the courts must employ a stricter standard of review: rather than the classification being reasonable for carrying out a legitimate (hypothetical) legislative purpose, it must be necessary for carrying out a compelling state interest before the courts will uphold it. This stricter standard came eventually to be triggered by "suspect classifications" such as race and national origin (but not sex) and by "fundamental interests" such as voting, interstate travel, and the appeal of criminal convictions (but not education).[13] Second, the willingness of the Court to recognize a valid racial classification depends on whether it is an expression of racial antagonism or hostility, or in a word racial prejudice. In Korematsu, the majority believed that the military danger was real and sufficient and did not reflect racial prejudice. However that may be, the important point is that it is not discrimination per se that is critical (every law, indeed, discriminates between classes of persons) but whether the discrimination

represents an insult or affront or arbitrary deprivation to the excluded group.

This last point should be borne in mind in assessing the decision in Brown v. Board of Education.[14] Unfortunately the language of Chief Justice Warren was not the most helpful, when he declared that "[s]eparate educational facilities are inherently unequal." The word "inherently" refers to a permanent and invariable attribute belonging to the essence of a thing. As used in Warren's phrase, it means that one cannot conceive of a situation, whatever the circumstances (in any possible world, as philosophers would say), in which separate facilities would not imply the social inferiority of one of the separated groups. That's obviously incorrect. The issue at stake was stated more precisely by one of the lower courts in the case in words which Warren quotes with approval:

> "Segregation of white and colored children in public schools has a detrimental effect upon the colored children. The impact is greater when it has the sanction of the law; for the policy of separating the races is usually interpreted as denoting the inferiority of the negro group."[15]

This statement places the act of separation in the social context that gives it meaning. It is only necessary to add that the "usual interpretation" was not unconnected to the usual motivation for separation.

For our purposes, however, the principal interest of Brown lies in another area. After declaring the doctrine of "separate

but equal" to be in violation of the Equal Protection Clause, the Court asked for further argument on the question of implementation. The justices apparently veiwed as the logical next step a decree requiring that, "within the limits set by normal geographic school districting, Negro children should forthwith be admitted to schools of their choice." But they wondered whether the Court might not move more gradually toward the elimination of segregated school systems "in the exercise of its equity powers." A year later this became the official position of the Court.[16] Instead of decreeing a particular remedy for the constitutional violation, it left the district courts to assess implementation plans on an individual basis. The courts were to proceed in the traditional manner of equity courts, displaying a practical flexibility in shaping remedies and a facility for adjusting and reconciling public and private needs.

Whether or not the Court realized from the beginning the implications of its articulation of equitable principles, it was drawn more and more deeply into the detailed examination and then supervision of desegregation plans -- at first (in the 1960s) by the failure of school districts to act or by various forms of sham compliance, and later (in the 1970s) by the zealousness and ingenuity with which some district judges fashioned remedial decrees. Eventually the Court was forced to clarify the requirements of equity and specify more exactly wherein remedial justice consisted. The most complete statement of principles appeared in Milliken v. Bradley,[17] though some of the groundwork had been laid in Swann v. Charlotte-Mecklenburg.[18] Both opinions were

written by Chief Justice Burger, for a unanimous Court in Swann and for a sharply divided court in Milliken.

The substantive issue in Milliken was the District Court's adoption of a metropolitan (or inter-district) plan for eliminating the segregation of students in Detroit public schools. The district judge had determined that the pattern of segregation was due to racially discriminatory actions taken by local and state officials, including gerrymandering of attendance zones, refusing to bus white students to under-utilized, predominatly black schools, and selecting the sites for new schools and closing old schools in accordance with a segregative design. In effecting a remedy for this state of affairs, the judge was faced with the fact that the student population of Detroit was already about 70% black and would likely become even more unbalanced because of white flight from the city if the desegregation decree were confined to the city limits. So he proposed a metropolitan plan, including the busing of students between Detroit and fifty-three suburban school districts surrounding the city.

The Supreme Court overturned this decree by a vote of five to four -- the first time the Court was so sharply divided in a desegregation decree -- claiming that the District court had exceeded its equitable powers. In defending this decision, the majority carefully identified four principles of equity which were to guide courts in fashioning remedial decrees. For convenience we shall refer to them as principles of (1) flexibility, (2) adjustment, (3) proportionality, and (4) restoration. We shall examine these principles in some detail, especially the

last two, and then draw out some implications for higher education.

(1) Equity is characterized by a practical flexibility in shaping remedies.

Flexibility is a traditional feature of equity courts.[19] In departing from the strict rule-following of common law adjudication, equity permits judges to mold their decrees to the exigencies of particular situations. This includes the power to bring before them parties not directly involved in litigation but with interests which would be affected by a judicial ruling. They are also not constrained to issue exclusive judgments, either for the plaintiff or for the defendant, but can adjust conflicting claims and balance the rights of all. Thus they could be said to do equity sometimes in the sense of achieving a compromise among contending parties (the third common meaning).

A further implication of the principle of flexibility is the logical separation of the judicial finding that a legally-protected right has been violated and the fashioning of a particular remedy for the violation. The one is not derived necessarily from the other. The Supreme Court illustrated this point in Brown by setting aside, as we have mentioned, what appeared to the Court as the obvious form of redress for state-imposed segregation: namely, allowing black children to attend schools of their choice. Instead district judges were instructed to be flexible.

For the court to adopt an equitable rather than a legalistic stance in desegregation cases is arguably within its powers. And the implicit acknowledgment that strict adherence to fixed rules

requires justification as much as the exercise of discretion is a point too often missed. But the reasons for adopting one procedure over the other in a particular line of cases need to be articulated. To point out, as one might, that district judges are in the best position to assess the possible impact of alternative remedies and to modify plans as conditions change is to identify some of the virtues of flexibility, without explaining why those virtues should count for more than the securing of an obvious remedy. The principle of flexibility, in sum, does not itself reveal why flexibility is desirable.

(2) Equity is characterized by an adjusting and reconciling of public and private needs.

The principle of adjustment requires courts to be sensitive to rights and interests that may conflict with a proposed remedy. In school desegregation cases, for example, courts must determine whether a particular plan will impinge significantly on the educational process or whether it involves too great a risk to the health of children. Such "costs" may weigh heavily against the imposition of particular remedies.

In this principle we can observe a concrete reason for insisting on flexibility and the local administration of remedial decrees. Conditions vary from one school district to the next; the potential problems raised by alternative plans need to be judged on an individual basis. At the same time, it is important to stress that not every "cost" counts equally. For example, some remedial programs may entail a financial burden that a majority of citizens do not care to bear. In such situations,

the Court has indicated, the desires of the majority cannot be permitted to overrule the correction of injustice.[20] Here the court is simply recognizing that protection of a person's constitutional rights often places constraints on majoritarian preferences. To be sure, the majority may have to be attended to, as a practical matter, if they threaten to be disruptive. Their preferences could reflect a depth of feeling, even if rooted in prejudice, which is politically destabilizing. But attending to a complaint is not the same as regarding it as legitimate. Only if opposition to a plan is based on a conflicting principle of sufficient constitutional standing is the search for alternative plans called for.

(3) The nature and extent of the violation determines the nature and scope of the remedy.

The principle of proportionality was the major ground for the Supreme Court's rejection of the metropolitan remedy in Milliken I. The reasoning, briefly, was this: The racially discriminatory acts were committed by officials connected with, or in connection with, the Detroit public schools. No officials in the outlying suburban areas were involved in such acts. Furthermore, the discriminatory acts of the local and state officials were not themselves the cause, or a substantial cause, of the inter-district racial pattern (white-populated suburbs and black-populated city). Therefore, the remedial decree must be confined to Detroit itself.

The Court could have reached the same conclusion had it relied on the equitable principle that a person cannot be re-

quired to make good a wrong done by someone else. It could then have argued that the metropolitan remedy placed an obligation on individuals (in the suburbs) who did not commit any unconstitutional acts. However, this principle is conspicuous by its absence in all of the school desegregation cases. The Court has not in fact been preoccupied with determining who exactly was responsible for past segregation, and it has not attempted to impose any special burden on those individuals when they have been identified. If it had, it might have treated desegregation suits as analogous to claims in tort and recognized a form of personal liability to compensate the victims of invidious discrimination. Money damages, to be sure, have not traditionally been considered a form of equitable relief, but the deeper point that the Court seems cognizant of is that an award of money is not adequate redress for the violation of a constitutional liberty, at least the equal right to a public education.

May the burden of redress then reach innocent parties, at least in principle? One affirmative answer to this question would rest on a deliberate blurring of the notion of innocence. The membership of school boards, after all, is directly or indirectly determined by the community as a whole; their acts are legally authorized by the public. Therefore, it could be argued, whatever is reprehensible in their conduct is rightly blamed on everyone. While this reasoning is not entirely misplaced, we prefer to circumvent the question of innocence, as we think the Court has done, by distinguishing two senses in which people can be considered responsible for a state of affairs. The first

sense is that of causal efficacy, where the person's act (or omission) produced the state of affairs in question. The argument from innocence (or lack thereof) is an attempt to establish responsibility in this sense. The second sense is what we shall call moral accountability, where a person owes a duty of beneficience to another person in distress and may be justly criticized (and sometimes held legally liable) for failure to act on the duty. Indeed, causal efficacy (i.e., being the cause of someone's distress) is a reason for considering a person morally accountable, but it is neither a necessary nor a sufficient condition of that. It is not necessary because the duty to act beneficently can arise independently of causation: for example, when one happens upon a drowning person whom it is possible to save with minimal risk to oneself, however the need for aid came about. And it is not sufficient because factors in addition to causal efficacy may defeat the claim of accountability: for example, when a homicide is committed in self-defense.

It is our thesis that the Supreme Court has adopted the broader conception of responsibility in reviewing remedial decrees for past segregation, so that some citizens can be required to make good the wrong done by others. And the court's position is not without justification, for it is only by engaging the resources of large segments of the population that an adequate remedy can be provided for the wrong that has been done. It does not follow, of course, that it is always clear how far the duty of beneficence extends -- and especially who may be legally required to perform it. The majority of the Court in

Milliken I perceived an important qualification to the duty of beneficence in the tradition of local control over the operation of schools. To the four dissenters, this seemed a flimsy pretext for failing to give Detroit school children their due. What divided the two sides, however, was not the question of principle so much as its application to the facts of the particular case: Justice Marshall demonstrated that the local control spoken of by the majority was virtually non-existent in the state of Michigan.

(4) The remedy must restore the victims of the constitutional violation to the position they would have occupied had the violation not occurred.

This principle is sometimes regarded as equivalent to the previous principle of equity, that the nature and scope of the remedy is to be determined by the nature and extent of the violation.[21] However, the principle of restoration is not an obvious reading of the principle of proportionality, and in any case it deserves consideration in its own right.

A striking feature of this principle is its rarity in other areas of the law. Thus it is not a basic principle of criminal law that the victims of crime should be restored to the condition they would have been in had the crime not occurred. Some crimes of course by their nature make rehabilitation of the victim unrealizable, such as homicide and rape. But even regarding those crimes the orientation of the law is toward the infliction of a penalty on the offender, rather than repairing, as nearly as possible, the damage done. Furthermore, it is noteworthy that in imposing penalties the criminal law does not attempt to determine the nature of the penalty by the nature of the offense. There is

a single schedule of exchange, as it were, namely fines and confinement, regardless of the wrong. Areas of the civil law sometimes approach more closely to applying the principle of restoration: for example, when a breach of contract is met by a judicial decree ordering performance rather than payment of damages (a remedy which apparently originated in equity courts). Still, most tort cases won by the plaintiff result in an award of monetary compensation, not restoration of the prior state of affairs. To attempt to explain these differences, however, would take us too far afield. We note simply that the restoration principle secures to people only that which they have a constitutional right to expect and of which they have been wrongly deprived.

It may be considered a weakness of the restoration principle that it says nothing about the violators of rights; it is only about victims. This seems to leave violators off the (moral) hook in two ways. The principle does not necessarily make the violators carry any of the burden for restoring the victims to their rightful place. We have already observed that the Supreme Court has extended the responsibility for remedying past segregation beyond those who caused it; the point here is that those who caused it may not be implicated at all. Furthermore, if the violators -- or indeed any third-parties -- have gained some benefit or advantage by the infringement of the victims' rights, the restoration principle does not seem to require them to yield that advantage. If that is so, the victims may find that, when restored to the position they would otherwise have occupied, they

are at a net loss rather than at status quo ante. (This would happen, for example, if qualified workers who were subject to discrimination in employment were granted the position they sought but were not given the seniority that would otherwise have accrued to them.)

On this last point, everything depends on how we understand "the rightful position" of the victim. It seems to us correct to say that, if an advantage held by a third party in the pursuit of schooling or of jobs is the result of invidious discrimination against others, to that extent the advantage is undeserved. So to deprive that party of the advantage in the course of remedying past discrimination is not to take from him anything to which he is entitled. Of course it is often extremely difficult to determine the actual basis of someone's advantage or disadvantage. But the factual difficuly does not undercut the moral point: a position of advantage or disadvantage due to discrimination is not the position a person "would have occupied" and the discrimination not occurred. We must conclude, therefore, that a remedy which yielded a net loss would not be acceptable under the restoration principle.

The Supreme Court has expressed this view in saying that "the ultimate objective of the remedy is to make whole the victims of unlawful conduct."[22] Yet, as it happens, the actual victims of the constitutional violation are not, by and large, accorded a remedy at all. In the Milliken case, for example, most of the victims of the racially discriminatory acts had already graduated from, or dropped out of, the Detroit public schools. No effort

was made to restore them to the position they would have occupied in the absence of the discriminatory conduct. Now this result may be considered a normal feature of a law suit, where the remedy is applied only to the parties in litigation, which in Milliken did not include former students of the Detroit schools. (It is intersting to consider what the courts would have done, or should have done, had a broader suit been filed.)

However, there is a more fundamental point at issue here. For it happened that many of the students on whose behalf the Milliken case was initiated were out of school by the time all the judicial questions were resolved more than six years later. The remedy nonetheless was applied only to students currently enrolled in the schools, not necessarily the litigants. This reflects a basic disposition of the Supreme Court in handling desegregation cases; the remedy is designed to have its effect on present and especially future students. The actual victims of past discrimination may receive no compensation whatever for the wrong done to them. Thus, in Milliken, after the Supreme Court had rejected the metropolitan plan, the lower court designed an alternative remedy confined to the city limits. A major component of this plan was a set of compensatory education programs, including remedial classes in reading and communication skills, bilingual classes and multi-ethnic curricula, revised testing procedures, new career guidance and counseling opportunities, and so on. These programs were made available to -- one might even

say they were designed primarily for the benefit of -- incoming students who had never been subject to the discriminatory acts of the school officials.

Despite the apparent gap between the victims of discrimination and the beneficiaries of the remedial programs, the Supreme Court unanimously accepted the revised plan as "aptly tailored to remedy the consequences of the constitutional violation."[23] The Court seemed to be aware of a certain element of paradox in approving a compensatory program that was prospective in nature but observed that the program was "plainly designed to wipe out continuing conditions of inequality produced by the inherently unequal dual school system long maintained by Detroit."[24] At first glance this way of proceeding seems to violate the elementary idea implicit in the restoration principle that it is the specific students discriminated against to whom an appropriate remedy is due. Instead the Court seems committed to the view that justly aggrieved minorities can be treated as a group, such that the wrong done to one member of the group can be balanced by a benefit conferred on another member of the group.

A tacit commitment to a group principle might provide the only complete explanation of the Court's decisions; however, such a principle is itself exceedingly difficult to justify and perhaps in the end not entirely coherent.[25] We are inclined, at any rate, to regard only part of the Court's position as sound. To suggest simply that the wrong cannot be undone, that past victims of segregative policies have been damaged beyond relief, will not do; for, in other areas of the law, the subjects of uncorrectable

wrongs are nonetheless provided compensation. We think the court has erred in failing to include such compensation in its guidelines for remedial desegregation decrees. On the other hand, it is important to realize that segregative policies in education do not disadvantage only the persons directly subjected to them. A person deprived of an average (not to say potentially superior) education not only loses that good itself but also loses the subsequent ability to compete equally for employment and hence for such goods as decent housing and adequate food. This deprivation has profound effects on the person's family. Inadequate diet and otherwise impoverished surroundings which are known to have resulted from invidious discrimination lower a child's ability to develop socially useful skills and, more importantly, lower the child's aspirations regarding careers and indeed the utility of education itself. Thus, the class of victims of segregative policies extends beyond those immediately affected to those who have, with good cause, been indirectly influenced by them. For this reason we believe the Supreme Court was on solid ground in treating minority students <u>who had yet to enter</u> the Detroit public schools as victims of its past segregative policies, and hence as deserving relief. Moreover, the appropriateness of the relief was evident, since it aimed at restoring the minority students' sense of competence and competitive ability.

To aim at such a result, however, is not to accomplish it; while the Court's relief is appropriate, it is not necessarily adequate for actually returning the victims of discrimination to the position they otherwise would have occupied. If a minority

student's competitive ability is completely restored by public school programs of the sort approved in Milliken II, that's well and good. If it is not (as seems more likely for at least the next generation), further compensatory programs are in order. One complicating factor in determining the adequacy of proposed remedies is the Court's reading of the restoration principle as requiring the correction only of that increment of disadvantage caused by the identified constitutional violation -- that is, to put the point more plainly, remedial education programs cannot be designed to make up for discrimination in non-educational settings. Here again the factual issue -- determining the source and extent of a person's disadvantage -- may present an insuperable obstacle to doing full justice. When people have been subjected to discrimination in a variety of important areas (education, housing, employment), there is probably no way to disentangle the effects of the practices of a single institution and certainly no way for that institution to nullify its effects by itself.

Nonetheless, certain assumptions are reasonable. For example, when minority students systematically fail to qualify for admission to elite colleges or professional schools, it is reasonable to suppose that the failure is due in large part to past discrimination in the public schools.[26] It follows that an adequate scheme of remedies, as determined by the restoration principle, would include preferential admission of disadvantaged minorities to those schools. Indeed the obviousness of this conclusion has already been acknowledged by most undergraduate

institutions. As we noted in Part I, preferential admission of disadvantaged minorities is standard practice. The failure at the college level lies not so much in admissions as in recruiting. Minorities are now admitted to college in roughly the same proportion as whites, relative to the applicant pool, but they are admitted at a lower proportion than whites (at least in elite colleges) when measured by their numbers in the total population of young adults.[27] The principal task for colleges, then, is to increase the size of the minority applicant pool.

Resistance to preferential admissions for disadvantaged minorities has been more apparent in professional schools. Two factors seem to explain this difference. First, there is a prevalent conception of the nature of undergraduate education that detaches it from the ladder of economic success. A liberal arts education is not simply a preparation for something else. It is a unique and irreducible experience, a period of cultural exploration which encourages experimentation, reflection, and self-discovery through an awareness of tradition, alternative modes of thought, alien cultures.[28] The capacity to benefit from such an experience, it is fair to assume, does not vary directly with performance on objective tests. Moreover, the experience itself is enriched when students come from a diversity of economic and social backgrounds. Second, there is a growing awareness that the sorting function performed by colleges has less to do with the content of undergraduate education than with sheer attendance. That is, the position of a student in the job queue depends more on mere possession of the bachelor's degree than on

any particular course of study undertaken or any particular college attended. This fact, indeed, may have helped reinforce the conception of undergraduate education just described. In any case, it is commonly believed that professional schools differ in both respects: the content of the education makes sense only as preparation for the career aimed at, and differential performance in courses is a key indicator of later success on the job. For this reason, we suppose, resistance to preferential admissions has been more substantial.

Since this issue is of enormous importance for the question of remedial justice, it is worth exploring, at least briefly, a few of the more common objections to preferential admissions in professional schools. We shall deal rather quickly with two objections -- (a) that preferential admission presupposes a group principle and (b) that it places an unwarranted burden on institutions that have not been guilty of discrimination -- because we have already worked out the grounds for answering them. We shall then treat at greater length a third objection: (c) that preferential admission is unfair to the non-preferred candidate because it requires a departure from meritocratic criteria and threatens to undermine the basic rationale of professional education.

(a) It is often claimed that preferential admissions programs are not defensible as a remedy for past discrimination because they provide their benefit (admission to a professional school) to members of minority groups simply on the basis of such membership, whether or not those members were actually victims of past discrimination. Or, conversely, it is claimed that such

programs are defensible only on the assumption that the wrong done to one member of the group can be balanced by a benefit conferred on another member of the group, an assumption that seems to violate an elementary principle of justice.

There is force in this claim, but it is misdirected because of an overly narrow definition of the class of victims of discrimination. We have already made the point that the class of "actual victims" properly includes both those directly and those indirectly disadvantaged by segregative policies. The typical preferential admissions program (such as the one established by the medical school at the University of California, Davis, prior to the Bakke decision) reflects this broad definition by employing the criteria of systematically poor performance on objective tests and economically deprived background to identify students eligible for special admission. Minority students failing to satisfy these criteria belong in the regular applicant pool. Thus there is a factual misrepresentation in the claim that preferential admissions programs do not benefit actual victims of discrimination.

Even if this were not so, however, the claim would not be as weighty as it first appears to be. For, just as people may be indirect victims of segregative policies so they may be indirect beneficiaries of remedial programs. This point is especially applicable to the training of doctors and lawyers, where it is in the nature of the occupation to provide a service to others. For the benefit actually to accrue to the victims of injustice, it may be necessary to oblige the specially-admitted graduates of

professional schools to spend a few years in disadvantaged communities. But we are not troubled by that prospect, since we believe that all doctors and lawyers have a duty to engage in public service for some amount of time.

(b) If preferential admissions programs were mandated by law, institutions not themselves guilty of discriminatory acts would be obligated to establish such programs. This would be a clear example of requiring innocent parties to make good the wrong done by others, which is contrary to principles of equity.

Here again we have already indicated our response. The responsibility for remedying past racial discrimination extends, in our view, beyond those who actively engaged in it. Indeed we do not see any a priori way of excluding (or excusing) any institutions or social groups from participating in the effort to alleviate the distress of disadvantaged minorities. As a practical matter, however, it is important to realize that policy initiatives in this direction are constrained by a variety of laws and judicial rulings. For example, Title VII of the Civil Rights Act of 1964, which makes it unlawful for employers to discriminate on the basis of race, includes an interpretive section stating that Title VII shall not be construed to require any employer to grant preferential treatment in order to remedy a de facto racial imbalance in the employer's work force.[29] Although this provision explicity applies only to Title VII, it would not be difficult to argue that Congress considers it to

reflect a proper understanding of the demands of the Equal Protection Clause and hence as constraining policies in other areas as well.

A second practical constraint on policy initiatives is the Supreme Court's restrictive interpretation of the Equal Protection Clause as applying only to "state action". In cases involving educational institutions, this means that the protections of the Clause come into play only when some governmental agency is implicated in the offensive conduct. As a consequence, public colleges and universities are vulnerable to legal burdens that cannot be imposed on private institutions. Application of the Due Process Clause of the Fourteenth Amendment to college disciplinary proceedings illustrates what effect the public-private distinction has. The leading case in this area is Dixon v. Alabama State Board of Education.[30] Several students were expelled from an Alabama state college because they had participated in an off-campus sit-in demonstration. They were not given any notice of the charges or a hearing concerning the allegations. So the question before the court was whether the college was required to follow the bare rudiments of procedural due process in expelling the students. The court decided in favor of the students, but the opinion made it clear that private institutions were not subject to the same strictures. The court posed the issue of the case in terms of the need to balance the "governmental" power being exercised by the college and the private interest at stake (the social and economic importance of obtaining a college education). But nothing in the court's

description of the exercise of disciplinary authority indicated how the nature and effect of decisionmaking by officials in state colleges differs from the exercise of similar powers in private colleges.

Analogous considerations apply to the Equal Protection Clause. The importance of collegiate and professional training to occupational success cuts across the distinction between public and private institutions. So any attempt to exempt the one group from legal burdens imposed on the other must appear arbitrary and unjustified.

(c) The previous arguments may be considered irrelevant, however, if it can be shown that a scheme of preferential admissions is fundamentally unfair to applicants who would have been admitted to a professional school had it not been for a preferential scheme. Two claims are commonly made to support the charge of unfairness: (1) the non-preferred candidates did not perpetrate the segregative policies and so should not be made to suffer for their remedy, and (2) the non-preferred candidates deserve the place denied to them because they are more qualified.

The first claim, clearly, is another version of the argument from innocence, and there should be no need to reiterate our response to it. Even if we put that issue aside, however, there is a further point to be made about the effects of past segregative policies on the present competition for professional education. In discussing above the Supreme Court's inclination to approve remedies that apply to indirect as well as direct victims of past discrimination, we observed that such a policy becomes

intelligible when it is realized that the good lost as a consequence of discrimination is the ability to compete equally with others for employment and the satisfaction of basic needs -- a loss which, inevitably, has a profound effect on subsequent generations. That point is relevant in the present context. For the favorable competitive position enjoyed by many non-minority applicants to professional schools is a direct result of the shrinkage of the total applicant pool caused by segregative policies. They have become, in other words, unwitting (and undeserving) beneficiaries of such policies. To deprive them of their favorable position by reintroducing minority students is only to restore the competition to something like what it would have been had the violation of constitutional rights not occurred. (Thus it is not unfair that the burden of preferential admissions falls principally on students with marginal credentials, rather than falling randomly on the total applicant pool.)

Justice Brennan argued to this effect in the Bakke case. He suggested, first, that the expectations of non-minority applicants are "tainted," since they are in part a product of discriminatory policies. Second, "there is a reasonable likelihood that, but for pervasive racial discrimination, respondent [Bakke] would have failed to qualify for admission even in the absence of Davis' special admission program."[31] Justice Powell objected particularly to the second point because (a) it requires "a speculative leap" unsupported by empirical evidence, and (b) it fails to clarify what standard the courts could use in "applying

such a presumption of causation to other racial or ethnic classifications."[32] However, it is not clear what sort of empirical evidence would have satisfied Mr. Powell, since he seems committed to the view that racial classification is unacceptable per se, regardless of its empirical consequences. And though he is right to wonder how other groups would fare under similar considerations, there should be no doubt that, if anyone is entitled to the benefits of a preferential program, black students are.[33]

The second claim of unfairness -- that preferential admissions are unfair to non-preferred candidates because they are more qualified -- is the core of perhaps the most common objection to preferential admissions programs. Yet a careful examination of the claim dissipates its force.

First, it is important to see that a person who qualifies for something does not necessarily deserve it. For example, a business corporation on the verge of bankruptcy may <u>qualify</u> for federal assistance under rules established by Congress, but it may not <u>deserve</u> the assistance if its financial difficulties are due to incompetent management or failure to keep up with technological innovations. To qualify for a benefit under an announced rule may even give a person a legal right to it, but to deserve a benefit is to possess certain qualities in virtue of which one is considered worthy of it, whether or not one is legally entitled to it.

Second, a person who <u>would</u> qualify for something if certain criteria were employed does not have any ground to complain when different criteria are used, unless the person can demonstrate

that only the favorable criteria are relevant to the thing in question. Thus a classical pianist who has received significant critical acclaim cannot complain when her application to join a cocktail bar combo is slighted in favor of a woman with less virtuosity but a more engaging style. The classical pianist may be more talented musically, more knowledgeable about the capacities of her instrument, and even more hard-working -- but still not more qualified for the available position. Only if she could demonstrate that "engaging style" is irrelevant to the job would she have a case.

We can now apply these observations to professional school admissions. Students who qualify for medical or legal training do not necessarily deserve to obtain it. To support the claim that they deserve it one would have to be able to identify certain personal characteristics in virtue of which it could be said that they are worthy of such training. What could such characteristics possibly be? Does high performance on standardized objective tests, for example, make a person <u>worthy</u> of becoming a doctor or a lawyer? It is plausible to claim, as liberal theorists often do, that people deserve to be given opportunities to develop and exercise their special talents in socially useful ways. Even if we grant this, it does not follow that people deserve the differential social rewards that have become attached to professional careers. But, more importantly, it is not at all obvious that doctoring and lawyering require talents that are

peculiar to those occupations. One thinks, of course, of the delicate hands of the brain surgeon, but how many other such examples come to mind?

These considerations permit a relatively straightforward answer to the claim that the non-preferred candidates are "more qualified" -- namely, that it rests on a misunderstanding. For with the introduction of the special admissions program the qualifications for admission have changed. The non-preferred candidates have a case only if they can demonstrate that the new criteria are not relevant to the practice of the career tney seek to be trained in. That's a very hard argument to make. In law, for example, there is a significant correlation between performance on the LSAT and performance in the first year of law school. But there is no significant correlation between a person's performance in the first year and her prospects of becoming a good lawyer. This fact is accentuated by the observation that the legal profession as a whole has done an extremely poor job of providing its services to a large segment of the population greatly in need of them. It is reasonable to believe that the new criteria of admission represent a significant step toward correcting that situation.

In conclusion, we should note that preferential admission to an educational institution is appropriate as an equitable remedy only if the candidate's capacity for learning has not been extinguished by past discrimination. It may have been diminished, but it still must be sufficient to take advantage of the opportunity provided. Preferential admissions programs recognize this

distinction by continuing to maintain a standard of minimum (but adequate) competence below which candidates will not be considered. What has changed from the past is the method of identifying students who meet the minimum; mere performance on objective tests won't do.

D. Fair Equality of Opportunity

We turn now from a consideration of equitable remedies for deliberate violations of people's constitutional rights under the Equal Protection Clause to a consideration of forms of redress for unfair disadvantages in the competition for educational, and thereby occupational, attainment. Here, too, the Equal Protectin Clause has been the principal locus of political (i.e., policy) debate, but there has yet to emerge any coherent judicial or legislative overview which identifies the central issues at stake or articulates a principled position by which to approach them. Therefore, while we shall begin our discussion by examining some recent judicial decisions, which will help us clarify the idea of equal educational opportunity, we shall soon leave them behind in favor of recent philosophical discussions.

To give some initial focus to our subject, we should note that we are not concerned with wrongs done by one individual or group to another, in the sense of willful and deliberate harms that upset the moral status quo ante. We are concerned rather with unfair situations resulting from either natural or impersonal social forces, in which people find themselves at a disadvantage in the quest for opportunities and rewards, both social

and economic. If there is a wrong involved, it consists not in the creation of the unfair situations but in the failure to correct them when they occur.

In general terms, the matter to be assessed is whether the actual distribution of advantages and disadvantages among persons is arbitrary from a moral point of view and ought to be rectified, to the extent possible, as a matter of social policy. This requires a consideration of the following sorts of questions. Is it an obligation of educational institutions to provide special programs for students marked by deficiencies or disabilities which are a product of social and cultural conditions? If so, is there any less of an obligation when the deficiencies result from lack of natural ability or talent? Does a student born with a handicap for which society is not causally responsible have a right to a greater share of societal resources than the average child, if that is necessary for developing the handicapped student's capacities? Is the answer to the last question the same if the student is gifted rather than handicapped? More generally, does equity require that educational institutions make the same proportionate contribution to each person's realizing the best life of which he or she is capable?

These are extremely difficult questions, and we can hope, in the discussion that follows, to offer only some partial responses.

Judicial decisions. In recent years many lower courts have employed the Equal Protection Clause, or its equivalent,[34] to secure equal educational opportunities for public school students

suffering from some cultural or natural disadvantage. A typical case is Serna v. Portales[35] in which the District Court for New Mexico ordered the Portales school system to expand bilingual-bicultural programs for Hispanic children, especially in the one elementary school, the Lindsey School, where they constituted a large majority. The plaintiffs conceded that the program in the Lindsey School was not inferior to that offered in any other elementary school in the district. To the contrary, it was precisely because the program was substantially equivalent to the others, they argued, that it constituted a denial of equal educational opportunity. The Court noted that the claim of equivalence was actually misleading, since the Lindsey School already offered limited bilingual-bicultural programs, but the Court went on to observe that the performance of students at the Lindsey School, as measured by various standardized tests, was consistently lower than that of children attending the other elementary schools. These results were taken by the court to be "indicative of the learning disability with which the Spanish-speaking child comes to school." Since the performance of the children at the Lindsey School "is not what it should be," it was clear to the Court that they do not enjoy equal educational opportunity and that a violation of their constitutional right to equal protection of the laws exists.

The final steps in this argument represent a novel turn in equal protection analysis. It is easy enough to imagine the objections of a more conservative court. For example, it might be pointed out that the line of Supreme Court cases from Brown v.

Board of Education required only that, if a state offered public education, it had to be offered on "equal terms". That is, within any school district, schools at the same grade level must be equipped with roughly the same facilities, resources, teachers, etc., and there must be no segregation of students by race. In Serna, however, the District Court has broadened the relevant considerations to include the ability of students to take advantage of the opportunities provided. As another court has noted, equality is now "measured not only by what the school offers the child, but by the potential which the child brings to the school. If the student is disadvantaged with respect to his classmates, the school has an affirmative duty to provide him with special assistance to overcome his disabilities, whatever the origin of those disabilities may be."[36]

Although the District Court of New Mexico did not discuss explicitly the conception of equal educational opportunity that allowed it to reach this novel conclusion, it is possible to reconstruct the reasoning which might have been involved. Since the doctrine of precedent would have the court begin its analysis with Brown, the first step is to identify the conception of equal educational opportunity implicit in the requirement that public schooling be provided to all on "equal terms". In a sense the Supreme Court's declaration in Brown was negative: race and, by extension, national origin are inappropriate grounds for determining a student's access to educational opportunities. This statement does not indicate what the appropriate grounds for determining access would be, but presumably the most appropriate,

and perhaps the only relevant, ground would be a student's ability to perform the work. So equal educational opportunity would consist in giving equal access to equally able students, regardless of race or national origin.

This formulation provides an entry for the District Court. Although "access" can be understood narrowly to refer simply to admittance to the classroom, it can also be construed more broadly to include the availability to the student of what is happening in the classroom. Accordingly the District Court could reasonably argue that a student who is not fluent in the language in which a class is being conducted does not have equal access to that educational situation, in comparison to students who are fluent. Certainly the performance of the contralingual student, in such a case, is not a fair measure of the student's ability or capacity to do the work. So, on the assumption that ability is randomly distributed among peoples who speak different languages, it follows that the student with no choice but to attend classes conducted in an alien language is denied equal educational opportunity.

A similar conclusion was reached by the Supreme Court in interpreting Congressional legislation. In Lau v. Nichols,[37] which involved Chinese-speaking students in San Francisco, the court relied on Title VI of the Civil Rights Act of 1964 and, more specifically, the H.E.W. guidelines issued under the authority of that Act. The guidelines were designed to ensure for minority students the opportunity to obtain the education being obtained by other students -- an aim that could easily be

read as requiring schooling on "equal terms". However, H.E.W. took the view that school systems are responsible for offering students a "meaningful education," to use Justice Douglas' phrase. Accordingly, it provided:

> "Where inability to speak and understand the English language excludes national origin - minority group children from effective participation in the educational program offered by a school district, the district must take affirmative steps to rectify the language deficiency in order to open its instructional program to these students."[38]

The Court consequently found it a relatively simple task to uphold the right of all Chinese-speaking students to a bilingual program.

It is important to stress, however, that the Supreme Court in Lau affirmed only the legislative right of students to equal educational opportunity; it did not adopt, and has not adopted in any other case, the expanded interpretation of the Fourteenth Amendment which regards every denial of equal educational opportunity as a violation of equal protection of the laws. The critical factor that might otherwise make this connection inevitable is, in our view, the absence of state action. In Serna, for example, it is clear that the decision does not rest on a showing that the cultural or linguistic "deficiencies" of the Hispanic students are at all related to past actions of the state, invidious or otherwise. As a result one cannot argue that the compensatory programs ordered by the District Court are remedies required by the equitable principles enunciated by the Supreme Court in the desegregation cases. Indeed the principles of equity are never mentioned in cases where the issue is dis-

advantage. If the lower courts have nonetheless found it plausible to conflate equal opportunity and equal protection, it is perhaps because such cases typically focus on the plight of a minority group -- or at least a group that can be thought of as subject to unwarranted discrimination. The effect of this conflation has been to enlarge the class of relevant "minorities," the most conspicuous new members being the poor and the handicapped.

The question of equal educational opportunity for the poor has arisen in relation to the traditional practice of financing school systems by taxation on the local property within each school district. Since property values vary enormously from one district to another, the fiscal resources available to schools vary as well. This inequity supports the claim that such financing schemes violate the requirement of Brown, and hence of the Equal Protection Clause, that public schooling be provided to all students on "equal terms". In assessing this claim, the courts have unfortunately adopted a narrow view of the controversy and have left the operative conception of equal educational opportunity largely unexamined. Thus, in Serrano v. Priest,[39] the California Supreme Court took the principal issue to be whether the financing scheme is subject to strict judicial scrutiny and, if so, whether the scheme is a necessary means to the compelling legislative interest in promoting local control of education. Since it decided yes on the first question and no on the second, the court in effect ordered the State of California to devise a financing scheme that distributed resources more

equitably. The weakness of this construction of the controversy was made evident two years later when the U.S. Supreme Court confronted a similar case, defined the principal issue the same way, and reached an opposite conclusion.[40]

It is possible that standard equal protection analysis simply fails to provide a handle for getting at the substance of these cases. One confirmation of this view is the way Justice Powell, who wrote the majority opinion in Rodriguez, was forced to retreat from the conception of equal educational opportunity underlying Brown. He noted that the appellees failed to observe that lack of financial resources "has not occasioned an absolute deprivation of the desired benefit."

> "The argument here is not that the children in districts having relatively low assessable property values are receiving no public education; rather, it is that they are receiving a poorer quality education than that available to children in districts having more assessable wealth. ... [A] sufficient answer to appellees' argument is that at least where wealth is involved the Equal Protection Clause does not require absolute equality or precisely equal advantages."[41]

It is true that a precise equality is not required, but the right to schooling on "equal terms" as provided in Brown would be quite empty without a rough equality in resources and opportunities. Justice Powell's opinion abandons equality althogether in favor of "minimally adequate" public education. (Although he did not enumerate any criteria of adequacy, we may presume that Powell would include the development of sufficient competence to participate intelligently in the political process and to formulate

and pursue meaningful career goals.) Justice Marshall, in dissent, rightly rejected Powell's substitution of minimal adequacy for equal treatment, observing that "this Court has never suggested that because some 'adequate' level of benefits is provided to all, discrimination in the provision of services is therefore constitutionally excusable."[42] Yet Marshall's dissent also fails to clarify the relation between equal opportunity and equal protection.

Interestingly enough, the plaintiffs in Serrano, a group of Los Angeles public school children and their parents, seemed to display a much better grasp of what needed to be decided. In their complaint, they pointed out how the method of financing schools by local taxation makes the quality of a child's education dependent on such fortuitous factors as geographical boundaries and the relative wealth of one's neighbors. They argued that equal educational opportunity requires mitigating the influence of such accidental factors, wherever possible. Building on the formula derived from Brown, we could say that, in this view, equal educational opportunity consists in providing equal access to equally able students, regardless of race, national origin, geographical location, or economic status. However, the California courts did not address this argument.[43]

The plight of handicapped children complicates the discussion of equal educational opportunity in a different way. some handicaps do not prevent otherwise talented students from meeting the most challenging standards of performance; to deny them access to educational situations because of their handicap is to determine

their opportunities on the basis of a factor as fortuitous as race or geographical location. Other students too often in the past have been wrongly categorized as disabled or educationally unfit where the fault lay rather in inadequate testing procedures or administrative impatience. After these groups are accounted for, however, there remains a large number of severely handicapped persons -- whether due to a congenital defect or some other misfortune -- for whom it is ludicrous to make available the same educational (and occupational) opportunities as are open to other students.

In discussing equal educational opportunity for the handicapped, therefore, it is essential to distinguish between those who are able to participate meaningfully in the learning process, though perhaps only with greater attention and resources than the average student receives, and those who are not. (We are not saying, of course, that it will always be easy to determine to which of these two groups a particular person belongs.) Unfortunately, in the landmark case of Mills v. Board of Education, Judge Waddy skirted this distinction by articulating a constitutional principle of suitability, according to which each child -- regardless of the degree of mental, physical, or emotional impairment -- has a right to "educational services suited to the child's needs."[44] In the abstract, this principle would seem to yield a qualitatively different educational experience for each child, especially since the educational needs of a child, we presume, would be related to the child's particular interests and aspirations, as well as his or her mental, physical, and

emotional condition. However, the practical meaning of Waddy's ruling is not that every student, at every level of ability, will receive individually-designed educational tuition, but rather that the severely handicapped will not be denied institutional support at public expense, however marginal its educational character. This policy may be laudable, but it is not a requirement of equal educational opportunity.

To summarize, recent judicial opinions dealing with typical forms of disadvantage in education appeal to three different conceptions of equal educational opportunity: (1) that each child is entitled to a minimally adequate education for the development of basic skills; (2) that each child is entitled to the education he or she needs, regardless of disability or impairment; and (3) that equally able children are entitled to equal access, regardless of race, national origin ... and perhaps regardless of geographical location, social class, and non-disabling handicap. Only the last of these three conceptions, we think, is consistent with accepted readings of the Equal Protection Clause, though very substantial doubt remains about all the items mentioned after the ellipsis. The burden of argument consists, first, in demonstrating what principle it is that ties together (or accounts for) all the features of persons considered irrevelant to the determination of their educational opportunities and, second, in demonstrating that this principle has constitutional standing. In the discussion that follows, we shall not concern ourselves with the second (legal) question, only the first, making use of recent philosophical materials to

elucidate a principle which entails compensatory educational programs for persons suffering from natural or social disadvantages.

The principle of redress. The principle that ties together the judicial decisions on educational disadvantage is what John Rawls has called "the principle of redress".

> "This is the principle that undeserved inequalities call for redress; and since inequalities of birth and natural endowment are undeserved, these inequalities are to be somehow compensated for. Thus the principle holds that in order to treat all persons equally, to provide genuine equality of opportunity, society must give more attention to those with fewer native assets and to those born into the less favorable social positions."[45]

This statement makes it clear that the standard by which disadvantage is assessed is equality of opportunity. It is the commitment to this standard that leads us to worry about those individuals who do not get a fair shake in the pursuit of economic and social benefits. When people's lack of success in this pursuit is due to no fault of their own but rather some fortuitous circumstance -- whether genetic (such as race or sex) or social (such as geographical location or the relative wealth of one's parents or neighbors) -- we believe compensatory efforts are in order to mitigate the influence of the fortuity. It is not always easy, of course, to establish when a person's conduct is more a consequence of "the bias of contingencies," as Rawls puts it, than of free and honest choices. This problem is especially acute in evaluating the role of aspirations in determining a person's life prospects. Nonetheless, when it is

clear that undeserved inequalities explain the pattern of socio-economic differentiation, we know we have fallen short of what equality of opportunity requires and should take steps to correct the situation.

To elucidate and support this argument, it will be helpful to ask why in general a liberal society, such as ours, thinks equality of opportunity is important. The answer will involve us somewhat in an examination of the tenets of liberalism.

Fundamental, in our view, is the contribution of equality of opportunity to individual self-development. Individuals flourish by engaging in activities for which they have both aptitude and endowment.[46] In the liberal view this flourishing is enhanced when it is the result of the individual's own choice. Indeed we may take as a defining characteristic of a liberal society that citizens, in John Stuart Mill's words, frame the plan of their life to suit their own character. This means they have a right to act on the basis of personal conceptions of their own good, so long as they do not infringe the similar right of others. It follows that occupational choices should be limited only by the willingness and ability of individuals to perform them.

This principle of liberal society needs to be qualified, however, in light of our increased sensitivity to the fact that the resources for developing and executing a personal plan of life may be unfairly distributed. Indeed liberals themselves divide on this point in a way that is important for our discussion. To give some structure to this division, we shall borrow Martin Golding's distinction between two kinds of rights

that might be said to belong to individuals: option rights and welfare rights.[47] Option rights define spheres of freedom within which individuals may act as they choose. Each individual is left with options to exercise or not, and other individuals have a duty not to interfere with that exercise or foreclose those options. A typical list of option rights would include what Mill identified as "the appropriate region of human liberty": (1) liberty of thought, feeling, and opinion; (2) liberty of tastes and pursuits; and (3) liberty of associating with others.[48] Welfare rights, on the other hand, are entitlements to some benefit, which it is the duty of others to provide. Examples include the right to an education (and hence the right to an equal education under the Fourteenth Amendment), the right to decent housing, and the right to adequate health care.

The claim we want to stress is that <u>traditional</u> liberals are principally concerned to defend and protect a set of option rights for individuals, while <u>contemporary</u> liberals have expanded their concern to include a significant set of welfare rights. This is not to say that contemporary liberals neglect option rights; to the contrary, the focus on welfare rights is aimed precisely at enlarging the opportunities for individuals to exercise their option rights and to distribute such opportunities more evenly to all citizens. Thus, while recognition of welfare rights is often regarded as reflecting a commitment to equality, strictly it is only equal liberty. Welfare rights generally provide for individuals with inadequate resources the minimum conditions necessary for the independence prized by traditional

liberals, that is, the ability to form for themselves and act on the basis of personal conceptions of how they ought to live.

If this claim is correct, it might at first glance seem irrational for traditional liberals to oppose recognition of welfare rights, since they seem to complement and enhance the exercise of option rights. The fact of the matter, however, is that the two sets of rights may sometimes conflict. A single example concerning occupational choice will help us illustrate this point.

One part of the liberal understanding of the late nineteenth and early twentieth centuries was that, in forming a plan of life to suit one's character, each citizen had a right to engage in "any lawful calling, business, or profession he may choose, subject only to any such restrictions as are imposed upon all persons of like age, sex and condition."[49] In the case of medical doctors, the right to engage in any lawful calling did not preclude state regulation in the form of the requirement of a license to practice, providing the criteria to be met for obtaining a license were appropriate to the profession and could be reasonably satisfied (even if by difficult study and application). The justification for licensing lay in the state's power to protect its citizens from their own ignorance and incapacity (a form of paternalism that has always been mixed with liberal principles), as well as from deception and fraud. However, within that limit, a doctor, like anyone else, was free to contract his services on any and only those terms he chose to accept.

This right of occupational choice was put to the test, and upheld, in a remarkable Indiana case.[50] A man became dangerously ill and sent for his family physician. The messenger informed the doctor of the man's illness, tendered him his fees for his services, and stated that no other physician was procurable in time to be of any use. The doctor's services were not required by any other patient, and he could have gone to aid the sick man if he had been willing to do so. However, he refused to render aid and the man died. His legal heir sued the doctor for wrongly causing the man's death by refusing to enter into a contract of employment. The court affirmed the doctor's freedom to contract or not as he wished.[51]

The importance of this case in the present context is that it makes evident the potential conflict between option rights and welfare rights. One cannot secure to all citizens a right to adequate health care without setting a variety of constraints on the practice of medicine as a vocation. (One can easily think of comparable examples involving teachers and housing contractors.) Indeed there is an element of paradox here: for the provision of health care (or education or housing) to all citizens is justified as a prerequisite for each person's being able to pursue a choice of vocation, yet it can be accomplished only by restricting or regulating some people's choices. When this sort of conflict occurs, liberals invoke further principles to resolve it -- principles which further divide the particular forms of liberalism, traditional and contemporary.

For our purposes, the important division concerns the proper relation between a person's talents and the rewards that might be gotten by exercising them. Let us imagine a liberal theorist with the task of allocating the goods and opportunities of a society to its members. It seems that the crucial fact the liberal ought to take into account is the difference in life plans between one person and another. Believing the chief good to be self-development (so that individuals should be able to realize the best life of which they are capable) and treating each person's plan as equally worthy of respect (as long as it does not violate anyone's basic rights), the liberal ought to arrange an unequal distribution so as to match plans with appropriate goods and resources as closely as possible. J.R. Pennock makes this point quite clearly:

> "The life of one [person] is equal to the life of another. The complete satisfaction of one is equal to the complete satisfaction of another, although (be it noted) this may require much more in the way of material well-being for one than for another."[52]

However, liberals in fact are usually uncomfortable with this entailment, perhaps in part because they are uncertain how to estimate the relative goodness of plans of life (and hence cannot determine what would be best for each person) or because they suspect that the guarantee of proportionate funding would lead to the formation of esoteric and artificial plans. More importantly, traditional liberals will reject a basic premise of the imagined distribution, namely the assumption of a single individual (or body) controlling the allocation of goods and opportunities in accordance with an independent standard. They will

rather regard as proper whatever distribution results from individuals freely exercising their capacities as they wish. In other words, traditional liberals will favor whatever distribution happens to occur under a traditional market economy -- not (as one might think) for reasons of efficiency, that is, that the most rational use of human and material resources occurs if people are allowed to follow their natural inclinations under conditions of fair competition, but for the liberal reason that if people are prevented from doing as they choose their natural inventiveness and enterprise will be stifled and their lives will become mean and impoverished. (Needless to say, it is richness in self-development that is at issue here.) If such an arrangement is also efficient, so much the better.

The difficulty with the traditional liberal's position is that the allocation of goods and opportunities that occurs in a traditional market (i.e., a market combined with private ownership of capital) is a function of the initial distribution of talent and resources. Initial inequalities in wealth and endowment produce further inequalities in opportunities, income, and social prestige. Traditional liberals may attempt to justify this result in two ways. First, they may argue that, if the initial inequalities were not acquired unfairly (justice in acquisition) and if the further inequalities were a natural consequence of voluntary agreements among contending parties in a free market (justice in transfer), then the resulting distribution of goods and opportunities, whatever it is, must also be considered just.[53] For this argument to apply to any concrete

situation, of course, the two conditional premises must be shown to hold true; no known economic order would bear that scrutiny favorably. However, even if we put that practical matter aside, the argument does not succeed -- because it begs the very question at issue. The traditional liberal must admit that the advantages which some people acquire simply by being born into a particular family or social class are undeserved, that is, there is nothing those people have done to merit the advantages they nonetheless possess by chance. It follows that any further benefits gained by virtue of such good fortune are equally undeserved. Conversely, the person with initially undeserved disadvantages does not merit whatever further disadvantages accrue therefrom. The question, then, is whether it is just to adopt economic arrangements, such as the traditional market, which allow people's lot to be determined by chance factors. The voluntariness of the transactions that may take place in a traditional market, once such an arrangement is assumed, does not demonstrate that the arrangement itself would be chosen if an alternative were available.

At this point the traditional liberal might fall back on a second (independent) claim, to the effect that the greater rewards gained in a traditional market by talented or otherwise favored individuals are merited by them in virtue of their greater contribution to our economic well-being. However, this claim reflects a confusion of the liberal and the efficiency arguments. People with different talents may deserve different opportunities to develop and exercise those talents: so even a

contemporary liberal would argue. It does not follow that they also deserve different economic and social rewards. (In sociological terms: social differentiation does not logically entail social stratification.) Conversely, the person who gains greater rewards in a traditional market economy does not necessarily contribute more to our socioeconomic well-being, as measured by any other standard, and so is not necessarily more deserving.

For these reasons we find contemporary liberals quite persuasive in arguing that social policy should mitigate the effects of natural accident and social fortune. Accordingly the traditional conception of equality of opportunity -- that available positions (promotions, etc.) should be open, without prejudice, to all who are willing and able to strive for them -- must be supplemented by the qualification that the prospects of developing one's abilities and aspirations should be (roughly) equal regardless of one's initial place in the social order.[54] Only then will the influence of unmerited assets and contingencies be properly checked.

This does not mean, of course, that contemporary liberals abandon the market economy, though they make a point of observing that the operation of a market is perfectly compatible with collective ownership of capital. One reason for maintaining this commitment appears to be the belief that a market is the fairest, and perhaps the only, way of assessing the true costs to the community of carrying out a particular plan of life.[55] Whether or not that is so, the liberal cannot consider the market a perfect mechanism for achieving self-development, since it makes

the prospects of a person's realizing a particular plan contingent on the accident of how many others have similar or complementary plans. If the integrity of a person's life is constituted by individual (and independent) choice, making a person's commitments dependent on the preferences of others must seem arbitrary from a liberal point of view. A more plausible, though residual, argument for the market is that any alternative would involve economic decision-making by government officials, who (even if democratically elected) could impose their own conception of good on others. If liberalism stands for any single proposition, it is that government must be neutral with regard to particular conceptions of good.[56] Exactly how that neutrality is to be instituted and maintained, however, remains problematic within liberal democratic theory.

In any case, given the assumption of a market, the contemporary liberal will attempt to mitigate the effects of natural accident and social fortune by a scheme of welfare rights. In education this entails compensatory efforts on behalf of disadvantaged students, so as to equalize their chances of acquiring appropriate knowledge and skills (where these are necessary to open up occupational opportunities) and of receiving educational certification (insofar as credentials determine one's place in the job queue regardless of achievement). If greater resources must be devoted to disadvantaged students in order to realize this goal, as undoubtedly would be the case, it is only to achieve a social order in which each person's plan of life is given the same respect. Under such conditions we would antici-

pate a representative student from any social class (advantaged or disadvantaged) having the same probability of enrolling in a specified type or level of higher education.

The question remains whether it is possible to specify with any exactness the class of disadvantaged students. Here we find no definitive formula or method by which public officials (judges, legislators, administrators) may clearly and exhaustively identify the proper targets of compensatory programs. The only point that is clear is the common element of fortuity and the aim to minimize the role of luck in determining people's life chances. The judicial decisions that we discussed above, whatever their conclusions, serve at least as an indication of the range of contemporary public recognition of likely categories of individuals who suffer from an unwarranted burden in the educational process. These categories are: race, sex, income class, cultural background, geographical location, and non-disabling handicap. In the discussion of policy that follows in Part III, we shall accept this range as defining the limits of our concern. It is for the sake of these groups that we shall recommend specific changes in institutions of higher education. But we should expect that at some later date the claims of other groups would need to be given equally serious consideration.

Finally, we would like to note that our discussion has analyzed the equality or inequality of educational opportunities in terms of a more general conception of equality of opportunity

as applied to socioeconomic status. As a result, educational situations have been viewed as means or stepping stones to extrinsic rewards. Since educational attainment bears a significant relationship to occupational success, at least when measured by such standards as years of schooling, this is not an unreasonable view to take. Yet it should be evident that educational opportunities also constitute an intrinsic good for individuals. To the extent that we have neglected this aspect of education, our analysis is incomplete. Here we shall content ourselves to make one point relevant to the present discussion, namely, that the distinction between intrinsic and extrinsic goods is not parallel to the distinction between private and public goods. Educational attainment can be a private good for an individual but still extrinsic, that is, a means to higher income or prestige. Conversely, educational attainment can be a public good precisely because it is an intrinsic good: by enriching the life of the individual it enhances the quality of our common experience. For this reason, we are inclined to believe that it is rational for individuals to want their fellow citizens to be as educated as possible regardless of the connections to occupational placement. However, that is an argument for another time.

PART II: FOOTNOTES

1) Ronald Dworkin, Taking Rights Seriously (Harvard University, 1977), pp. 101-105.

2) A similar observation about English draftees in World War II is made by Brian Barry, Political Argument (Routledge and Kegan Paul, 1965), p. 153.

3) 280 N.Y. 124, 19 N.E. 2d 987 (Court of Appeals, 1939).

4) Aristotle, Nicomachean Ethics, Bk. V, Ch. 10, 1137b27-28.

5) Chaim Perelman, The Idea of Justice and the Problem of Argument, trans. by John Petrie (Routledge and Kegan Paul, 1963), pp. 29-36.

6) See Theodore Plucknett, A Concise History of the Common Law 5th ed. (Little, Brown, 1956), esp. pp. 673-707.

7) Some typical principles are the following: 'equity suffers not a right without a remedy'; 'whoever brings a suit in equity must come with clean hands'; 'one cannot be required to make good a wrong done by someone else'.

8) 347 U.S. 483 (1954) [Brown I], 349 U.S. 294 (1955) [Brown II].

9) Yick Wo v. Hopkins, 118 U.S. 356 (1886). The individuals receiving unequal treatment were Chinese.

10) The classic analysis of the Court's equal protection decisions is Joseph Tussman and Jacobus tenBroek, "The Equal Protection of the Laws," 37 California Law Review 3 (September, 1949), pp. 341-381.

11) 323 U.S. 214 (1944).

12) Ibid., at 216.

13) It should be noted that a few members of the present Court are unhappy with the dual standard of review and are searching for an alternative analysis of the Equal Protection Clause.

14) 347 U.S. 483 (1954) [Brown I].

15) Ibid., at 494.

16) 349 U.S. 294 (1955) [Brown II].

17) 418 U.S. 717 (1974) [Milliken I], 433 U.S. 267 (1977) [Milliken II].

18) 402 U.S. 1 (1971).

19) See Joseph Story, Commentaries on Equity Jurisprudence, 14th edition by W.H. Lyons, Jr. (Little, Brown, 1918), section 28.

20) See Green v. Prince Edward County, 377 U.S. 218 (1964).

21) See Robert D. Goldstein "A Swann Song for Remedies: Equitable Relief in the Burger Court," 13 Harvard Civil Rights-Civil Liberties Law Review 1 (Winter, 1978), p. 7. The two principles are used equivalently in Dayton v. Brinkman, 433 U.S. 406, 420 (1977), but not in Milliken II, 433 U.S. 267, 280 (1977).

22) Milliken II, at 280 n. 15.

23) Milliken II, at 287.

24) Ibid., at 290. In a footnote, the Court added: "[T]he injunction entered here could not instantaneously restore the victims of unlawful conduct to their rightful condition. Thus, the injunction here looks to the future, not simply to presently compensating victims for conduct and consequences completed in the past."

25) For a defense of a group principle, see Owen Fiss, "Groups and the Equal Protection Clause," 5, Philosophy and Public Affairs, (1976), pp. 107-177; for criticism, see Michael Bayles, "Reparations to Wronged Groups," Analysis, vol. 33 (1973), pp. 182-4.

26) The qualification "in large part" is meant to point only to the difficulty of determining the effects of other forms of discrimination on educational performance. We observed in Part I that differential test scores do not provide a basis for questioning the presumption that abilities are randomly distributed among races and ethnic groups.

27) Even this measure is not adequate for a complete compensatory program. Matching the proportion of admittees to the proportion of young adults yields only the number of minorities one would expect in college had no discrimination occurred. A complete compensatory program would also recruit students from the population of older adults who could take advantage of a college education.

28) See Robert Paul Wolff, The Ideal of the University (Beacon, 1969), pp. 15-18.

29) The distinction between requiring an employer to grant preferential treatment and permitting the employer to do so was critical for the Supreme Court's decision in United Steelworkers of America v. Weber, 61 L. Ed. 2d 480, 490 (1979).

30) 294 F. 2d 150 (5th cir. 1961).

31) Regents of the University of California v. Bakke, 438 U.S. 265, 324, 365 (1978).

32) Ibid., at 296 n. 36.

33) For a convincing argument that women as a group have not suffered the deprivations of black people and therefore cannot make as strong a claim for preferential treatment, see George Sher, "Justifying Reverse Discrimination in Employment," 4, Philosophy and Public Affairs, 2, (1975).

34) For example, in Mills v. Board of Education, 348 F. Supp. 866 (1972), the District Court of Washington, D.C., relied on the Due Process Clause of the Fifth Amendment to enjoin defendants from excluding "exceptional" children from regular public school classrooms or such other public educational services as are suitable to the children's needs, regardless of mental, physical, or emotional disability or impairment.

35) 351 F. Supp. 1279 (1972).

36) Ninth Circuit court of Appeals in Lau v. Nichols, 438 F. 2d 791 (1973), cert. granted, 412 U.S. 938 (1973).

37) 414 U.S. 563 (1974).

38) 35 Fed. Reg. 11595.

39) 487. P. 2d 1241 (1971).

40) San Antonio Indep. School District v. Rodriquez, 411 U.S. 1 (1973). The vote of the court was 5 to 4.

41) Ibid., at 23-24.

42) Ibid., at 89.

43) It should be noted that the failure of the courts is much less spectacular than that of the Congress, which is not hampered by the doctrine of precedent. The Senate Select Committee on Equal Educational Opportunity (Report, 92nd Congress, 2nd Session, December 31, 1972) described poor children as "victims" of the inequitable ways of raising and distributing funds for public education. Yet none of its recommendations touched even remotely on financing schemes.

44) 348 F. Supp. 866, 878 (1972).

45) John Rawls, A Theory of Justice (Harvard University, 1971), p. 100.

46) See John Dewey, Democracy and Education (Macmillan, 1961), pp. 88-90. A logical extension of this observation is what Rawls has called "the Aristotelian principle": "other things equal, human beings enjoy the exercise of their realized capacities (their innate or trained abilities), and this enjoyment increases the more the capacity is realized, or the greater its complexity." A Theory of Justice, p. 426.

47) "Toward A Theory of Human Rights," 52, The Monist, (1968), pp. 521-549.

48) J.S. Mill, On Liberty, ed. E. Rapaport (Hackett, 1978), pp. 11-12.

49) Dent v. West Virginia, 129 U.S. 114, 121 (1889). Herbert Spencer formulates the "right to free industry" as "the right of each man to carry on his occupation, whatever it may be, after whatever manner he prefers or thinks best, so long as he does not trespass against his neighbors." The Principles of Ethics (Liberty Fund, 1978), vol. II, p. 149. Today, of course, we would reject general restrictions based on age, sex, and condition (social position), but we are not concerned with that point here.

50) Hurley v. Eddingfield, 59 N.E. 1058 (1901).

51) It is important to note that, while the decision in Hurley has never been overruled, a similar case today would be brought in tort, not contract.

52) Liberal Democracy: Its Merits and Prospects (Rinehart, 1950), p. 85.

53) See Robert Nozick, Anarchy, State and Utopia (Basic Books, 1974), ch. 7.

54) Rawls says: "The expectations of those with the same abilities and aspirations should not be affected by their social class." A Theory of Justice, p. 73. This statement does not take account of the fact that aspirations themselves are significantly affected by social class.

55) See Ronald Dworkin, "Liberalism," in Public and Private Morality, ed. S. Hampshire (Cambridge University, 1978), p. 131.

56) Dworkin, p. 127.

PART III: POLICIES

Our analysis of practices in American higher education and of principles of equity raises, in our minds, three compelling policy issues for consideration by the federal government:

1. How can the stratification by race, and to a lesser extent by sex, that continues to exist within the higher education system, be reduced?
2. How can social class disparities in access both to higher education generally and to higher status institutions be reduced?
3. Should the federal government propose policies to reduce state-to-state disparities in both access to higher education and the cost of attending; and if so, what should these policies be?

Problems, Practices and Principles

Our identification of these three policy issues emerges from consideration of the data reviewed in Part I and of the principles of equity in Part II. To summarize, the data we examined revealed important race and sex differences in enrollment in post-secondary institutions. The problem was not so much in

attendance per se -- the enrollment rates of blacks and women are rapidly approaching those of white men -- but in the type of institutions attended. Blacks have been greatly over-represented in public community colleges and greatly under-represented in both public and private four-year colleges and universities. Both blacks and women are under-represented in professional and graduate schools. These groups, then, while they are able to enroll in some type of higher education, are not attending more advanced and higher status institutions.

The data revealed additional disparities by social class. Young people from lower income families are less likely to go on for higher education than children of the more affluent. When they do attend, low income children are disproportionately represented in public community colleges and in vocational-technical training. They too are under-represented in higher status colleges, universities, professional schools and graduate schools.

Finally, the data revealed substantial state-to-state differences in both college attendance and college costs. Because undergraduate education takes place in many local markets rather than a national market -- most students attend public institutions in their home states -- these state-to-state disparities profoundly influence the opportunities available to the citizens of different states. Because undergraduate education is now mostly public, state differentials in the subsidies provided to higher education mean that students of some states pay substantially less for their education than do students from poorer or stingier states.

Our identification of these disparities as problems rather than simply as interesting facts stems from our analysis of principles of equity in Part II. In that section we argued that past discrimination by race and sex is a wrong that demands remediation. Principles of equity require not only that discrimination be stopped but also that the groups who were victims of past discrimination have their situation restored, as far as possible, to what it would have been in the absence of discrimination. If we assume that in the absence of discrimination, abilities and motivations would have been distributed randomly by race and sex (and we see no reason not to make that assumption), these principles suggest that the remediation of discrimination entails moving toward an eventual situation in which attendance is evenly distributed among all relevant groups. That race and sex disparities continue to exist is evidence that the effects of discrimination have not been eliminated.

Our analysis of undeserved inequalities rests on different grounds but still leads us to conclude that disparities by social class, cultural background, handicap, and geographical location are inequitable and require redress. Our argument here is moral rather than constitutional. We argue that equality of opportunity requires that access to occupational positions and rewards not be determined by fortuitous circumstances. Social policies, therefore, should be designed to mitigate the effects of arbitrary disadvantage. That disparities by social class, geography, and handicap continue to exist suggests that further public efforts are necessary if equal opportunity is to be achieved.

We believe, therefore, that our documentation of disparities by race, sex, social class, and geography reveals genuine problems. Our constitutional and moral commitments to equity require society to tackle these inequalities. In the remainder of this section we raise some of the issues the policy makers will have to face in order to solve these problems.

The Policy Context in Higher Education

Federal legislation and judicial decisions have over the last few decades involved the federal government in important efforts to remedy discrimination and redress undeserved disadvantages. Civil rights legislation has been on the books since the middle 1960s. Judicial decisions and administrative practices to implement constitutional and legislative mandates have, in many instances, embodied the equitable principles we outlined; indeed our analysis builds on judicial interpretations of "equal protection of the laws." There is, of course, dispute in both Congress and the Supreme Court over Affirmative Action and preferencial treatment which our analysis suggests are both appropriate and necessary to remedy the effects of past discrimination. Nonetheless, the broad policy framework for tackling discrimination is in place.

Policies and programs to redress undeserved disadvantages in higher education also exist, though they are less comprehensive and consistent than anti-discrimination policies. Federal and state governments provide substantial subsidies to higher edu-

cation, partly (if not mostly) to make it possible for students from lower income families to attend college. These subsidies are geared toward enabling lower income students to attend some post-secondary institution, not toward equalizing opportunities to attend all institutions. Moreover, the subsidies are not complete, in contrast to public elementary and secondary education, because students must pay part of the money costs and all of the opportunity costs of attending. Nonetheless, state subsidies to higher education do work toward redressing the undeserved inequalities of family income. Federal student assistance programs, particularly Basic and Supplementary Educational Opportunity Grants, are even more explicitly targeted toward that end.

Federal legislation aimed at redressing the effects of handicaps is also in place. This legislation requires states to provide free and appropriate public education for all handicapped citizens between the ages of 3 and 21. Federal legislation also forbids discrimination on the basis of handicap in higher education and requires structural and curricular modifications to permit access by handicapped persons. This legislation moves very strongly, therefore, toward the notion of redress for the undeserved disadvantages of the handicapped.

Policies for redressing geographical disparities, on the other hand, have not been accorded high priority and are not well developed. Federal student assistance programs, particularly the Basic and Supplementary Educational Opportunity Grants, are somewhat responsive to institutional cost differentials, allowing

larger grants (but only up to a 1/2 cost or $1,800 maximum) to students attending higher cost institutions. The federal government also provides some money for the development of institutions, which can be used by states to expand higher education opportunities. Other than these programs, however, there are few policies directed at state-to-state differentials. In this area, substantial new initiatives would be required.

Issues for Policy Development

Though current policy provides a good base for action, we believe that further federal action is in order if equity in higher education is to be achieved. We do not consider it to be our task here to identify specific new initiatives that would improve present policy. Our analysis does, however, suggest a number of issues that policy makers will have to confront and some general directions that policy might take.

Test scores. The use of standardized tests in the admissions procedures of the more selective colleges, universities, graduate and professional schools poses a serious obstacle to achieving adequate representation of minority groups in those institutions. Our analysis did not lead us to conclude that academic ability should be irrelevant in higher education. We emphasized access for the equally able, but without firm notions of how to assess ability, which abilities are relevant, or which gradations are important. We find no reason to believe that abilities in a broad sense are differentially distributed by race or class, and we therefore believe that differences in narrow measures of

ability-test scores should not hinder movement toward better representation of minorities in the various segments of higher education. Consequently, admissions policies which either eliminate test scores entirely or admit minorities who have lower test scores than admitted whites are both appropriate and necessary. As Bakke-like cases come before the courts and as requirements for affirmative action are further developed, we hope this principle will be recognized.

In the long run, it might be only fair to move toward eliminating stratification by tested ability altogether -- however it is measured -- particularly within state systems. This move would be especially sensible if ability is not a fixed quality of individuals but is instead evoked by the opportunities they face. Tracking low performing students into community colleges rather than state universities, as presently happens, may deny them opportunities to perform as well as they could. Perhaps a "common college" for the first two years would provide a better chance for students of all ability levels to develop their talents and demonstrate academic potential. Federal programs might be designed to encourage states to move in that direction.

Motivation and aspirations. Much of the research leads us to believe that stratification is rooted in aspirational and motivational differences. We see no reason to believe that motivation ought to be differentially distributed by race or any other category, and thus we do not believe it can justify differential results. But motivation cannot be irrelevant in admissions decisions: if people are not motivated to apply they cannot be

admitted. Therefore, we cannot argue, (as we did with test scores) that the solution is to downplay the importance of motivation in admitting and assigning students. Policy has to be directed at the process by which aspirations are formed. We do not know how to do this, though we think that counseling (both formal and informal) in elementary and secondary schools could probably be improved.

Availability and costs. Despite some research which suggests that the location and price of educational institutions does not make much difference in students' decisions to go to college, it is still true that minority and low-income students are far better represented in the California system than they are in most other state systems. The very low cost and very wide availability of higher education in California cannot be completely irrelevant to explaining this fact. Nor does it seem likely that increases in minority enrollment during the 1960s and 1970s were completely unrelated to the expansion of low-cost state systems and of student assistance.

This would seem to lead us toward favoring more and cheaper public higher education. The best analogy might be elementary and secondary education, which is financed completely by public subsidies, on the grounds of both equal opportunity and the provision of a public good. It could be argued that higher education also provides a public good in the form of a more

productive, better informed, and more cultured citizenry. That, plus the boost that free public higher education would provide for minorities and the poor, might justify substantial public subsidies.

Higher public subsidies would, however, raise two questions of equity that need to be considered. First is the problem posed by the facts that not everyone attends college and that attendance varies by class. Subsidies are neither equally nor equitably distributed. As long as the better off attend college in higher proportions than the less well off, public subsidies that make education less costly for everyone subsidize the rich more than the poor. A second and related problem is posed by the fact that higher education gives private as well as public benefits. Because those who attend college tend to be better off in adult life than those who do not, partly as a result of attending college, subsidies for college attendance go disproportionately to those with better economic prospects.

We see two possible ways out of this dilemma. One would change present policy so as to encourage state systems to move closer to full-cost pricing, with student loans provided to everyone who wants them. On the plus side, this would make private colleges more competitive and thus help avert the potential ruination of many superior educational institutions as a consequence of the population decline in the 1980s. Full-cost pricing also means that large state subsidies would not be going to children from well-off families. On the negative side, the availability of student loans -- even if pay-back schedules are

related to income during adulthood -- is still not likely to eliminate (though it may mitigate) differential attendance by class. To the extent that students have unequal initial resources, the financial burden of college attendance will be similarly unequal. The calculation of benefits will vary accordingly. To avoid this consequence, one would have to add student assistance for low-income groups. (Student assistance programs could be expanded, of course, if more tuition revenues were being gathered from higher income students.) Thus our support of full-cost pricing is dependent on two conditions: the provision of loans for everyone and assistance to low-income students.

A second approach to the dilemma builds on the notion of higher education as a public good but specifies what students must contribute to the society in order to justify public investment in their education. The model here is the program of Public Health Service fellowships for medical students. In return for federal subsidy of their medical education, students agree to work, year for year, in a public health facility or a medically underserved area. They thus contribute to the public good in return for their subsidies.

Such a program could be extended to other professions, such as law, engineering, and city planning, or indeed to all of higher education. Public education would entail public service in one or another area of national need. (Educational benefits

tied to military service are another example of this principle.) This might be a very expensive program since both education and public service jobs would have to be financed. It is, however, an appealing approach to a complicated problem.

There are, of course, many other issues that arise around the financing of higher education and many other proposals that could be considered. We have neither the expertise nor the inclination to take them all up. We wish here only to call attention to the issues that any financing scheme must confront: the inseparability of public and private benefits, and the difficulties of designing programs that both promote equality of opportunity and distribute costs and benefits equitably.

Geographical disparities. Our review of the data pointed out enormous disparities in educational opportunities and educational costs between states. Young people have different life prospects stemming from accidents of birth: The lucky who live in California or a few other states are much more likely to attend college than those in other states. Like other fortuitous circumstances, geographical location as a source of disadvantage would seem to require redress.

Geographical disparities arise because of a long historical tradition of state, and to some extent local, responsibility for public higher education. States have exercised this responsibility deficiently, with some developing extensive, highly-subsidized systems while others have not. The states are not

likely to reduce these disparities on their own initiative. Federal involvement, therefore, while highly suspect, is probably necessary to reduce inequalities.

The best federal leverage on cost differentials would probably come from student assistance programs. Grant levels are now partly responsive to costs; making them more so would reduce the incentive for low-price states to maintain their very high subsidy levels. Federal student assistance programs could also, no doubt, develop other incentives or requirements for states to move closer to full-cost pricing, thus reducing state-to-state differentials as well as redirecting subsidies from high income to low income students within states.

The reduction of state-to-state disparities in availability -- the number of institutions and places per young person -- is harder to get a handle on. Massive federal assistance to those states with a relative shortage of places would be very expensive. It would also have the unfortunate effect of rewarding those states which, for whatever reasons, have not allocated substantial state resources to higher education. Some such assistance may, however, prove the only way of alleviating state-to-state disparities.

The issue of geographical disparities has attracted little academic or political attention, and thus few creative proposals for alleviating the problem are available. We believe that equity requires that more thought be given to the issue.

Moral Obligation and Public Policy

The translation of moral principles into public policy is a complicated task. We have shown, we hope, that the task is necessary. We have tried to demonstrate how moral principles underlie policy questions and how they can provide some guidance in determining policy directions. We have also suggested how moral principles can pose dilemmas for policy, when competing or mutually exclusive rights and obligations seem to be simultaneously required. We have not, clearly, resolved these dilemmas or even analyzed them very fully. We have not, for example, considered the constraints imposed by limited resources, even when our moral obligations are clear, and the competing moral claims of various population groups. Even on the rather limited topic considered in the report -- equity in higher education -- investigation of these issues has only begun.

Appendix Table I

Growth in Student Enrollment; 1948-1978

	TOTAL	Public 2 year	Private 2 year	Public 4 year	Private 4 year
1948	2,403,396	153,970	57,007	1,031,618	1,160,801
1953	2,218,287	215,356	50,443	960,380	992,108
1958	3,420,414	442,881	82,728	1,590,962	1,303,843
1963	4,814,933	740,799	111,573	2,365,169	1,579,320
1968	6,928,115	1,169,635	120,358	3,722,108	1,916,014
1973	9,602,123	2,889,621	120,428	4,529,895	2,062,179
1978	11,285,787	3,901,769	141,173	4,945,224	2,297,621

Sources: Condition of Education, 1975, p. 190; Condition of Education, 1976, p. 187; Digest of Education Statistics, 1968, p. 77; Digest of Education Statistics, 1969, p. 65; Digest of Education Statistics, 1979, p. 89.

Appendix Table II

Growth in College Enrollment Rates of 18-24 Year Olds

Year	Total %	White Male	White Female	Non-White Male	Non-White Female
1948	11.2	*	*	*	*
1952	11.5	*	*	*	*
1956	15.3	23.8	10.5	11.5	6.3
1960	17.2	25.8	12.3	10.7	7.6
1964	20.5	29.1	16.0	9.7	9.3
1968	26.0	36.5	20.1	15.6(1)	13.7(1)
1972	25.5	31.3	21.9	20.9(1)	15.7(1)
1976	26.7	27.1	25.6	22.0(1)	23.0(1)
1977	26.1	28.7	24.4	20.2(1)	22.2(1)
1978	25.2	27.6	23.8	19.6(1)	20.6(1)

(1) These rates include black enrollment only.

* Separate data by race and sex unavailable.

Sources: Current Population Reports P-29 #s: 24, 43, 74, 110, 148, 190, 260, 333, 346

Appendix Table III

High School Non-Completion Rates
Cohorts Born 1943-47, 1948-52 and 1953-57
Percent not Enrolled in School and not High School Graduates at Age 20-24 by Sex and Racial Ethnic Group

	Cohort born 1943-47	1948-52	1953-57
White Male	18.8	15.3	14.9
White Female	19.0	16.6	13.5
Black Male	42.6	27.2	24.3
Black Female	36.1	27.3	25.1
Hispanic Origin Male		44.4	41.7
Hispanic Origin Female		44.3	41.2

Source: Condition of Education, Table 5.5

Appendix Table IV

College Enrollment Rates of Primary Family Members 18-24 Years Old by Family Income 1978

	All Income	Less Than 5,000	5,000-9,999	10,000-14,999	15,000-19,999	20,000+	Not Reported
All Races							
Male	27.8	16.6	17.2	19.6	25.1	41.6	29.5
Female	23.8	10.8	13.4	17.3	21.7	42.3	27.9
White							
Male	28.5	16.5	16.2	19.4	25.2	42.0	30.0
Female	24.1	9.8	11.8	16.3	21.1	42.1	28.3
Black							
Male	19.7	16.2	17.8	19.6	17.1	30.6	21.4
Female	20.9	12.2	17.9	23.1	25.6	48.2	26.3
Hispanic							
Male	16.2	11.3	8.2	20.4	29.2	35.7	6.1
Female	13.9	6.5	8.8	16.2	16.0	34.5	19.5

Source: Current Population Reports, "School Enrollment: Social and Economic Characteristics of Students: October 1978, Series P-20, No. 346, Oct. 1979, Table 12.

Appendix Table IV - A

Enrollment Rates out of total Population of Primary Family Members 18-24 Years Old by Family Income 1978

	All Income	Less Than 5,000	5,000-9,999	10,000-14,999	15,000-19,999	20,000+
All Races						
Male	27.8	1.3	2.9	3.7	3.7	15.6
Female	23.8	1.2	2.6	3.5	3.2	10.8
White						
Male	28.5	1.0	2.4	3.8	4.0	14.6
Female	24.1	.8	2.1	3.4	3.4	11.9
Black						
Male	19.7	3.7	5.3	3.4	1.6	3.8
Female	20.9	3.6	5.2	3.7	2.3	2.8
Hispanic						
Male	16.2	1.7	2.7	4.8	3.0	3.6
Female	13.9	1.1	3.1	3.5	1.5	2.5

Source: Same as Appendix Table IV.

Appendix Table V

Graduate and Professional School Enrollment

Law	68	69	70	71	72	73	74	75	76
Total Enrollment	62,800	68,400	82,500	94,500	102,000	106,000	111,000	117,000	116,000
% Women	5.9	6.9	8.5	9.4	12.0	15.8	19.7	22.8	25.5
% Minorities			3.6	5.9	6.6	7.2	7.5	7.4	8.2

Source. American Bar Association Law School and Bar Admission Requirements: A Review of Legal Education in the United States - Fall 1975. Chicago: 1976 and 1977.

Medicine									
First-year Enrollment	9,900	10,400	11,300	12,400	13,700	14,200	14,800	15,300	15,600
% Women	9.0	9.1	11.1	13.7	16.7	19.7	22.2	23.8	*24.9
% Minorities	2.9	4.8	7.0	8.6	8.6	9.2	10.0	9.1	9.0

Source: W.F. Dube. "Datagram: Medical Student Enrollment, 1972-1973 through 1976-1977." Journal of Medical Education, 1977, 52, 164-166.

Appendix Table V (cont'd.)

Graduate School	68	69	70	71	72	73	74	75	76
Total enrollment (in thousands)	885	955	1,031	1,012	1,066	1,123	1,190	1,232	1,268
% Women	36.9	38.3	38.7	39.2	41.2	42.4	44.3	44.6	44.6
% Minority	5.3	--	7.7	--	9.2	--	9.2	12.2	12.5

Source: Carnegie Council on Policy Studies in Higher Education. Selective Admissions in Higher Education (San Francisco: Jossey-Bass, 1977) pp. 90 and 160.

Population 21-24	(1977)	15,136,000
% Women	51.4	
% Minority	14.0	
% Blacks	11.0	

Appendix Table V (cont'd.)

Comparison of Minority Representation in Graduate Business School Enrollments

Academic year	Blacks	Hispanic	American Indian	Asian American	Other	Women	Total
1971-1972	236 (2.2%)	84 (0.8%)	30 (0.3%)	99 (0.9%)	10,300 (95.1%)		10,833 (100%)
1973-1974	1,077 (3.4%)	340 (1.1%)	82 (0.3%)	345 (1.1%)	29,446 (94.1%)		31,290 (100%)
1974-1975	4,445 (4.0%)	1,203 (1.1%)	259 (0.2%)	2,077 (1.8%)	104,333 (92.9%)		112,317 (100%)
1975-1976	2,832 (3.7%)	828 (1.1%)	112 (1.2%)	1,273 (1.7%)	71,078 (93.4%)	14,041 (18.4%)	76,123 (18.4%)

Source: Carnegie Council on Policy Studies in Higher Education. Selective Admissions in Higher Education. (San Francisco: Jossey-Bass, 1977) p. 119.

Appendix Table VI

Enrollment Rates by Geography and Cohort 18-24
1976

Region/State	Total Enrollment	Black		White		Male		Female	
		% enrollment	% cohort enrolled	% enrollment	% cohort enrolled	% enrollment	% cohort enrolled	% enrollment	% cohort enrolled
Northeast	1,694,132	8.3	23.9	85.9	26.6	51.6	29.5	48.4	26.4
Maine	29,575	.7	—	97.7	22.2	56.6	26.6	43.4	18.1
New Hampshire	32,528	1.6	--	96.2	31.0	56.9	37.7	43.1	26.5
Vermont	23,447	1.5	—	96.5	39.0	47.6	37.2	52.4	43.9
Massachusetts	245,383	4.1	45.3	91.1	30.5	51.3	31.4	48.7	33.6
Rhode Island	42,063	3.4	20.3	94.3	36.7	56.5	43.2	43.5	31.0
Connecticut	109,408	5.3	18.1	91.7	28.3	51.7	29.0	48.3	27.3
New York	655,204	11.4	25.1	79.7	28.1	50.9	31.9	49.1	28.3
New Jersey	212,623	10.8	24.7	83.5	22.8	49.5	24.0	50.5	24.0
Pennsylvania	343,901	7.4	18.2	89.8	23.0	53.0	25.9	47.0	20.8
North Central	2,194,361	8.7	26.7	87.9	30.4	52.4		47.6	
Ohio	357,266	11.1	28.7	86.8	25.9	53.2	29.6	46.8	23.9
Indiana	169,063	5.9	22.2	91.7	38.3	54.4	27.0	45.5	22.5
Illinois	462,039	13.7	27.1	81.5	32.4	49.8	32.0	50.2	33.5
Michigan	389,746	11.3	28.5	85.1	31.2	53.0	35.5	47.0	28.8
Wisconsin	191,523	3.9	33.9	93.3	30.8	53.4	34.7	46.6	28.8
Minnesota	147,387	1.7	35.5	94.9	27.0	50.5	28.2	49.5	27.7
Iowa	97,666	2.3	32.2	95.2	25.9	53.0	28.3	47.0	25.1
Missouri	171,047	9.0	18.3	88.6	30.6	52.7	31.8	47.3	26.9
North Dakota	25,828	.5	—	95.4	28.3	54.2	29.2	45.8	26.9
South Dakota	24,592	.5	--	95.8	27.1	56.7	31.7	43.3	22.2
Nebraska	64,860	3.7	26.9	93.9	31.9	54.6	37.7	45.4	27.3
Kansas	93,344	5.1	27.8	89.4	28.4	53.0	32.6	47.0	26.9

Appendix VI (cont'd.)

Region/State	Total Enrollment	Black		White		Male		Female	
		% enrollment	% cohort enrolled	% enrollment	% cohort enrolled	% enrollment	% cohort enrolled	% enrollment	% cohort enrolled
South	2,432,621	16.3	22.4	77.3	27.3	52.4	29.7	47.6	26.3
Delaware	24,801	13.1	24.9	84.6	30.0	50.4	30.5	49.6	29.3
Maryland	161,730	19.4	29.0	76.5	31.3	48.3	31.9	51.7	31.5
Dist. of Columbia	42,559	45.1	25.9	42.1	74.7	48.5	43.0	51.5	42.1
Virginia	151,856	17.0	26.4	81.2	23.9	50.2	24.5	49.8	23.9
W. Virginia	58,349	5.2	37.8	92.4	26.8	52.0	26.0	48.0	27.7
N. Carolina	204,269	20.8	24.1	77.3	32.4	54.7	33.5	45.3	26.4
S. Carolina	98,420	23.3	18.5	75.7	28.8	55.9	28.7	44.1	22.5
Georgia	132,938	19.2	13.4	78.5	25.3	53.4	23.3	46.6	20.3
Florida	284,869	12.2	19.4	79.0	28.0	53.7	31.8	46.3	25.9
Kentucky	100,968	8.6	19.8	92.2	25.3	50.0	23.7	50.0	25.0
Tennessee	146,863	15.5	23.4	82.6	28.0	53.1	29.4	46.9	26.1
Alabama	131,137	22.3	23.9	76.2	33.3	54.1	34.6	45.9	28.7
Mississippi	80,482	31.4	23.2	65.0	29.4	50.3	28.3	49.7	27.2
Arkansas	56,546	16.5	17.6	81.6	23.7	51.8	23.4	49.2	21.3
Louisiana	127,307	25.3	22.0	70.9	24.0	51.6	25.3	49.4	23.4
Oklahoma	120,322	7.0	28.0	84.1	32.6	54.9	30.7	45.1	30.8
Texas	609,125	10.6	25.8	73.6	24.1	54.2	27.0	45.8	25.3

Appendix Table VI (cont'd.)

Region/State	Total Enrollment	Black		White		Male		Female	
		% enrollment	% cohort enrolled	% enrollment	% cohort enrolled	% enrollment	% cohort enrolled	% enrollment	% cohort enrolled
West	2,096,939	6.4	42.3	77.5	37.4	52.2	45.0	47.8	39.5
Montana	25,624	.6	15.5	94.2	24.1	53.6	25.9	46.4	21.2
Idaho	32,400	.6	--	94.7	28.4	51.4	29.2	48.6	29.2
Wyoming	14,645	1.5	--	91.9	26.4	52.7	28.6	47.3	25.7
Colorado	117,528	3.4	26.6	87.1	36.8	55.0	36.9	45.0	27.3
New Mexico	40,087	2.5	19.9	66.3	19.7	54.7	29.2	45.3	21.6
Arizona	140,870	2.9	44.1	83.7	41.7	54.4	49.7	45.6	41.2
Utah	76,170	.6	11.3	92.4	40.7	56.5	50.0	43.5	35.3
Nevada	19,019	4.4	14.0	89.2	24.6	55.5	29.3	44.5	20.6
Washington	136,116	3.2	33.7	89.8	28.4	49.4	30.1	50.6	29.1
Oregon	105,484	1.4	29.5	93.4	33.3	53.3	38.5	46.7	29.3
California	1,345,609	8.7	45.9	73.5	42.5	51.5	52.2	48.5	48.1
Alaska	4,519	4.1	9.3	78.5	8.3	46.1	6.7	53.9	9.4
Hawaii	38,868	1.0	19.2	23.3	21.1	54.1	31.9	45.9	27.4

Source: Fall Enrollment on Higher Education (1976)
Current Population Reports, "Demographic, Social, and Economic Profile of States: Spring 1976," P. 20, No. 334.

Appendix Table VII

Enrollment in Two-Year Colleges as a Percent of Total College Enrollment (1976)

State/Region	Total Enrollment	% Black Enrollment	% White Enrollment	% Male	% Female	% To
Northeast	598,889	44.8	34.5	34.1	36.6	35.
Maine	5,263	7.9	18.1	18.7	16.6	17.
New Hampshire	4,827	3.2	15.3	15.8	13.5	14.
Vermont	3,296	3.2	14.2	12.6	15.4	14.
Massachusetts	81,637	29.0	33.7	32.3	34.3	33.
Rhode Island	8,974	12.6	22.0	17.4	26.4	21.
Connecticut	35,376	51.5	30.8	31.6	33.1	32.
New York	263,840	45.0	39.8	39.4	41.2	40.
New Jersey	93,930	55.9	43.3	42.1	46.2	44.
Pennsylvania	101,746	42.5	28.9	28.7	30.6	29.
North Central	726,430	53.3	36.1	35.9	39.6	37.
Ohio	111,598	40.0	30.2	28.8	34.0	31.
Indiana	16,762	15.8	9.5	11.5	8.1	9.
Illinois	284,879	68.3	60.7	57.9	65.4	61.
Michigan	176,953	56.0	44.6	43.5	47.6	45.
Wisconsin	68,563	48.9	35.2	36.5	35.0	35.
Minnesota	31,693	15.2	22.0	20.1	22.9	21.
Iowa	30,634	28.1	31.7	32.9	29.6	31.
Missouri	51,961	62.8	27.4	28.7	32.3	30.
North Dakota	7,400	9.6	27.8	32.7	23.8	28.
South Dakota	465	.8	1.9	.4	3.9	1.
Nebraska	14,915	31.1	22.8	24.8	20.8	23.
Kansas	30,607	40.1	31.7	31.1	34.7	32.

Appendix Table VII (cont'd)

State/Region	Total Enrollment	% Black Enrollment	% White Enrollment	% Male	% Female	% To
South	959,725	38.5	38.6	39.9	39.0	39
Delaware	9,633	47.3	37.3	39.8	37.9	38
Maryland	81,364	52.0	50.0	48.3	52.2	50
Dist. of Columbia	114	--	--	--	--	
Virginia	87,876	49.1	59.0	57.5	58.2	57
W. Virginia	14,124	14.1	25.2	23.1	25.6	24
N. Carolina	94,144	44.6	46.6	48.4	43.3	46
S. Carolina	36,942	46.2	34.9	42.3	31.5	37
Georgia	42,487	27.7	33.2	33.7	30.0	32
Florida	173,034	63.1	59.9	56.3	65.8	60
Kentucky	19,849	31.4	17.7	18.7	20.6	19
Tennessee	34,744	31.5	22.4	24.2	23.1	23
Alabama	43,143	30.8	33.6	34.3	31.2	32
Mississippi	34,158	37.1	43.0	43.2	41.7	42
Arkansas	9,410	16.1	16.6	16.7	16.6	16
Louisiana	15,325	15.0	10.9	13.2	10.8	12
Oklahoma	40,367	43.7	32.3	33.3	33.9	33
Texas	223,011	47.6	40.4	44.3	43.2	43
West	1,490,001	81.2	67.7	66.4	70.0	68
Montana	2,725	.6	10.4	8.7	13.0	10
Idaho	9,730	9.0	30.2	24.6	35.8	30
Wyoming	10,336	61.6	71.5	63.8	78.1	70
Colorado	40,317	46.6	33.0	33.7	35.1	34
New Mexico	6,585	17.9	17.5	14.5	18.7	16
Arizona	96,288	82.0	64.9	65.6	71.7	68
Utah	14,333	12.6	18.9	21.4	15.4	18
Nevada	13,381	95.7	70.0	80.8	57.4	70
Washington	145,659	(data unavailable)				
Oregon	66,845	60.5	64.3	57.9	69.6	63
California	1,063,614	83.7	79.4	77.1	81.1	79
Alaska	941	(data unavailable)				
Hawaii	19,217	59.4	45.7	49.7	48.6	49
U.S. & Dist. of Columbia	3,883,325	49.6	44.7	44.9	47.4	46

Source: Fall Enrollment on Higher Education (1976).

Appendix Table VIII

Discriminant Equations and Correlation Coefficients for Composite Measures and Attendance

(n = 4,375)

Discriminant Equations

	Place-School	Place-Friends	Complete Model
Place	(.014)	(.008)	(.009)
Background	.146	.050	.031
School	.082	.029	.020
Student		.219	.063
Friends		.098	.048
Occupation			.035
Aspiration			.041
Plans			.219
Constant	.455	.455	.455
Correct classifications	68.1%	80.0%	84.6%

Correlations

	Place	Background	School	Student	Friends	Occupation	Aspiration	Pla
Place	1							
Background	.147	1						
School	.323	.288	1					
Student	.125	.380	.258	1				
Friends	.102	.294	.269	.483	1			
Occupation	.058	.234	.169	.494	.321	1		
Aspiration	.083	.310	.220	.686	.439	.488	1	
Plans	.108	.341	.239	.661	.476	.518	.651	
Attendance	.123	.344	.257	.589	.456	.452	.560	.69
Dependence on prior variables:								
Multiple R		.147	.404	.411	.514	.505	.716	.74
R^2		.022	.164	.169	.264	.255	.512	.55

Note: Coefficients not significant at the 0.05 level are enclosed in parentheses.

Source: Gregory A. Jackson. "Financial Aid and Student Enrollment," Journal of Higher Education, 1978.

Appendix Table IX

Per Student Spending By State

State	Public Enrollment	Spending	Spending/Student
Alabama	139,797	235,298,000	$1690.29
Alaska	21,167	73,478,000	$3471.35
Arizona	176,499	201,728,000	$1142.94
Arkansas	61,281	98,870,000	$1613.39
California	1,562,027	2,215,424,000	$1418.30
Colorado	139,688	178,269,000	$1276.19
Connecticut	92,420	134,095,000	$1450.93
Delaware	26,243	39,889,000	$1519.99
Dist. of Col.	13,292	36,533,000	$2748.50
Florida	300,562	434,691,000	$1446.26
Georgia	139,957	235,867,000	$1685.28
Hawaii	43,246	81,885,000	$1983.47
Idaho	32,203	65,500,000	$2033.97
Illinois	467,885	691,929,000	$1478.84
Indiana	170,643	283,320,000	$1660.31
Iowa	86,365	201,885,000	$2337.58
Kansas	113,783	170,471,000	$1498.21
Kentucky	108,043	200,822,000	$1858.72
Louisiana	131,986	217,565,000	1648.39
Maine	29,631	45,068,000	1520.97
Maryland	187,627	244,633,000	$1303.83
Massachusetts	163,849	218,008,000	$1330.54

Appendix Table IX (continued)

Michigan	420,298	604,363,000	$1437.94
Minnesota	148,044	242,153,000	$1635.68
Mississippi	87,353	147,286,000	$1686.10
Missouri	154,503	230,344,000	$1490.50
Montana	28,531	43,529,000	$1525.67
Nebraska	67,002	114,940,000	$1715.47
Nevada	31,214	38,674,000	$1239.00
New Hampshire	23,869	27,124,000	$1136.37
New Jersey	230,327	322,570,000	$1400.49
New Mexico	51,482	70,650,000	$1372.32
New York	543,570	1,491,961,000	$2744.74
North Carolina	203,073	349,165,000	$1719.41
North Dakota	30,117	48,006,000	$1590.81
Ohio	353,128	451,120,000	$1277.50
Oklahoma	127,797	130,807,000	$1023.55
Oregon	125,028	192,956,000	$1543.30
Pennsylvania	284,846	526,078,000	$1846.89
Rhode Island	33,580	51,357,000	$1529.39
South Carolina	99,606	188,322,000	$1890.67
South Dakota	22,535	33,574,000	$1489.86
Tennessee	145,886	191,699,000	$1314.03
Texas	567,362	849,202,000	$1496.76
Utah	55,511	95,570,000	$1721.64
Vermont	17,381	18,750,00	$1078.76
Virginia	225,709	254,101,000	$1125.79

Appendix Table IX (continued)

State	Public Enrollment	Spending	Spending/Student
Washington	239,525	306,103,000	$1277.96
West Virginia	70,464	87,574,000	$1242.82
Wisconsin	213,081	424,848,000	$1993.83
Wyoming	19,727	39,812,000	$1967.46

Note: Enrollment in public postsectondary institutions includes students from both in- and out-of-state. Although out-of-state students pay more tuition, they nevertheless receive the same subsidy as in-state students. Private institutions also receive state and local subsidies, however the amount is quite small, 1 to 2 percent, compared to more than 45 percent for public institutions.

Sources: Fall Enrollment 1977 Table 9A
Digest of Education Statistics 1977-1978 Table 138